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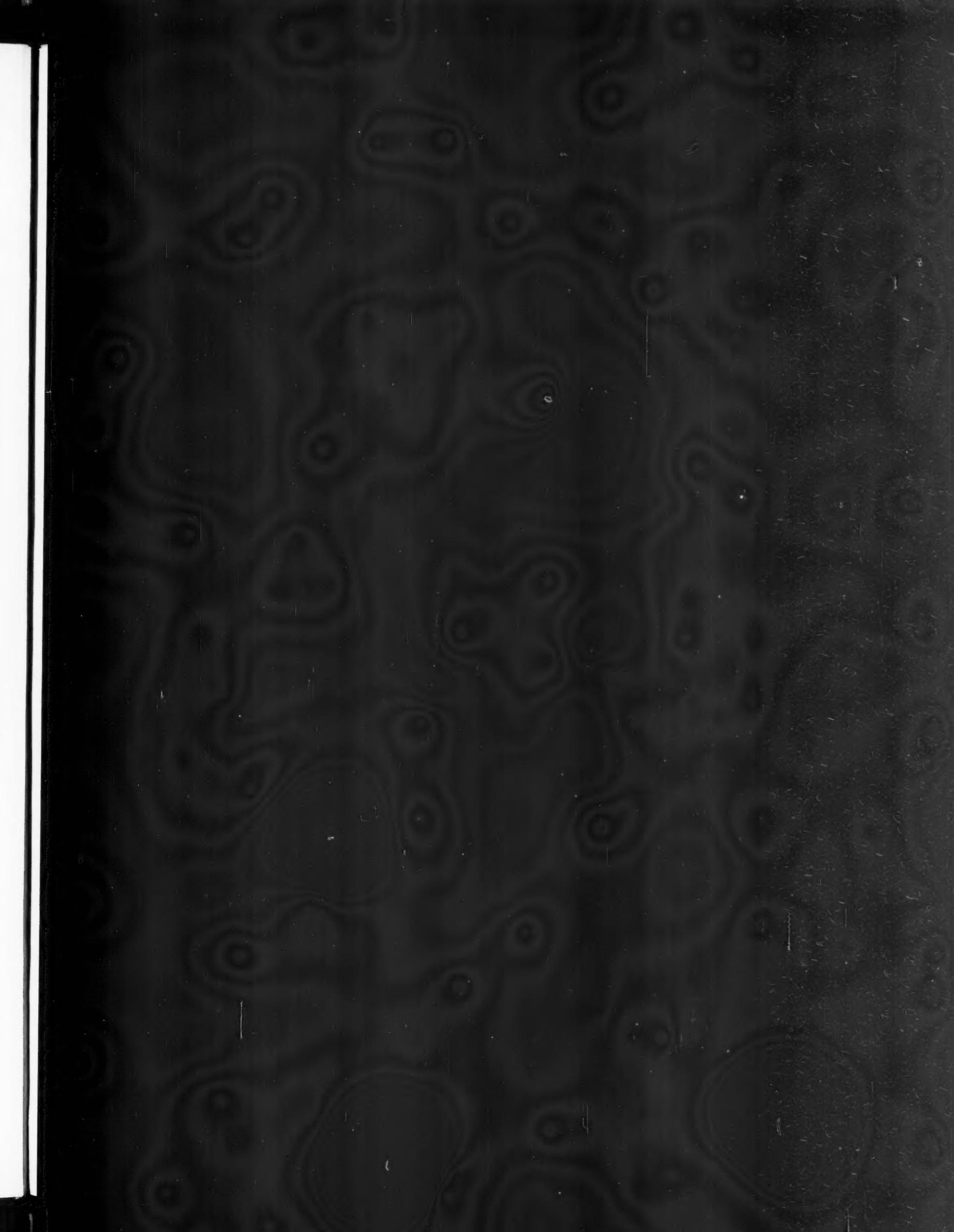
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The Architectural Review

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One of the most spectacular scenes to be seen in Bath after the recent "Baedeker" air raids, was this one in Lansdown Place East, where the dressed masonry has been stripped by blast from the facades of the houses, revealing the rubble structure and rough wooden lintels beneath. Lansdown Place East forms the eastern extremity of a continuous series of terraces curving elegantly along the contours of the high ground to the north of the city. It dates from about 1800, and thus from some years after the golden age of Bath architecture, which explains the relatively less solid construction. The architect was probably John Palmer, who was responsible for Lansdown Crescent, the central part of this sequence of terraces. The photograph is by Hans Wild, by courtesy of "Life" magazine.

A I R - R A I D D A M A G E A T B A T H

The Preraphaelite Myth

By Geoffrey Griggs

They did not find, they sought: and therefore they failed.

ARE we to limit Preraphaelitism to the Preraphaelites, to the actual members, that is, of the P.R.B.; and if we do, can we say that there was such a thing as a Preraphaelite "tragedy"? Was there in the Preraphaelites a great power of talent, tragically—a flabby and vulgar adverb—tragically frittered away through weakness before circumstance and before strength of social development? Did they make a "revolution", and then betray it? Are there Preraphaelite master-paintings, or only the arrested, etiolated seedlings of such a master-art?

Or were those original Preraphaelites men of a remarkable and talented self-importance, who managed to surround themselves, for posterity, with a set of gigantic magnifying-glasses? What would happen if we took a frank, and honest, and intimate look over the rim, over those lenses of self-esteem? What would happen if we set the Preraphaelites, with their contemporaries, and their fellow-travellers, all in a natural and undistorted and impartial focus, if we took an inclusive view?

None of these questions can be answered easily. To be certain in one's answers, one would need to be able to estimate English painting between, say, the 1848 of Millais' "Lorenzo and Isabella," and the 1860 of Dyce's "Pegwell Bay." One would need to be sure about the painting attached to certain names—Dyce, for one, Augustus Leopold Egg, for another; and John Brett, and James Smetham, and Richard Burchett, and W. L. Windus, and John Lewis, and R. B. Martineau. To be certain would mean years of penetration into private houses, into provincial galleries, and into a hazy and hardly documented past. Distracting the investigator at each cautious pace is the glittering magnifying-glass of the P.R.B., and warning one off are those massive volumes—Holman Hunt's autobiography, *Preraphaelitism and the Pre-Raphaelite Brotherhood*, *The Life and Letters* of Sir John Millais, and the many chronicles edited by William Michael Rossetti—in which the P.R. brethren,

or their next-of-kin, cried their own goods, and their own good ideals; and then behind these loud-speakers, endlessly stream lesser voices, pro and con of which the latest is *The Pre-Raphaelite Tragedy* of Mr. William Gaunt.* The effect of all this noise is to induce belief that mid-nineteenth century art in England was the P.R.B., was, in definition even more defined, Holman Hunt and Sir John Millais, with the uncertain allegiance of Dante Gabriel Rossetti. On the fringe, Ford Madox Brown; but Brown, Holman Hunt was careful to say, was never invited to belong to the P.R.B. And not only, is it to be inferred from their books, was all English art of significance their art; but they, the Preraphaelites, invented it. There was no descent, no tree, there were no visible parents, there was not even an act of artificial insemination: there was simply an invention, almost *in vacuo*. Respect for predecessors, but not very detailed respect, is about as much ancestorship as Preraphaelite chroniclers allow. The critical point is, really, what the Preraphaelites thought, and said, about Nature. Here are some texts:

"A child-like reversion from existing schools to Nature herself."

"Our original doctrine of child-like submission to Nature."

(Holman Hunt).

"The Pre-Raphaelites had but one idea—to present on canvas what they saw in Nature."

(Sir John Millais).

"Millais said that he had thoughts of painting a hedge (as a subject) to the closest point of imitation, with a bird's nest—a thing which has never been attempted. Another subject he has in his eye is a river-sparrow's nest, built, as he says they are, between the reeds; the bird he describes as with its head always on one side, 'a body like a ball, and thin legs like needles.'"

(P.R.B. Journal, edited by W. M. Rossetti, May 23, 1849).

Even Rossetti—"even" because Rossetti and Nature in this detail were never very closely

* Jonathan Cape, 1942. Price 10s. 6d.



R. B. Martineau: *Kit's Writing Lesson, 1852.* Tate Gallery

acquainted—even Rossetti, in prefacing "The Germ," wrote that: "The endeavour held in view throughout the writings on art will be to encourage and enforce an entire adherence to the simplicity of nature."

I think there is no doubt that this attention to Nature they held to be one of their peculiar virtues and one of their peculiar discoveries. And they are still being given credit in their own valuation. But what about Constable, Samuel Palmer, John Linnell, Cotman (Rossetti's earliest drawing master), G. R. Lewis and John Lewis, James Ward, Francis Danby, and Burchett again, and Bird's Nest Hunt, and Augustus Egg? And earlier still, what about Stubbs? Before the P.R.B. ever formed themselves, attention to Nature had had a long, slowly changing history in English art. There had been two reasons for it: the scientific, and the religious reason. Stubbs was a scientific "naturalist": Samuel Palmer a religious "naturalist." Stubbs's friend was the anatomist John Hunter, who set out to dissect and classify the whole of animal creation. When he was eighty-two—nineteen years before the birth of Millais—and dying, Stubbs regretted that he had not finished his comparative anatomy of the hen, the tiger, and the human being. The first book the Preraphaelites illustrated—Allingham's *Music Master, and Day and Night Songs* has a number of poems of Aeolian Harp music, and the Aeolian Harp was the prime image of the other, the religious or romantic, naturalism. The source of that attention to nature is, above all things, in Jakob Boehme, the German mystic of the seventeenth century. An essential part of Boehme's doctrine was that God, as the fountain of all things, had set his likeness on every substance and creature. Everything on earth was the pattern of something more perfect and more beautiful in Paradise. That is to say, the things which the scientific naturalists admired for their own merit could be admired religiously because they were divine, and patterns of the more complete divinity of Heaven. The music made by, or on, the Harp of Aeolus, the box-harp played by the wind, was the music of Nature; its long sequaceous

The Preraphaelites in their writings wish to appear without ancestors, creators of an art invented in vacuo. Yet there were many, utterly unknown now, to whom they owed much: Theodor von Holst, for instance, whom young Rossetti called a great artist and whose frontispiece to Frankenstein is here for the first time illustrated. Richard Burchett whose Cornfield can be seen at the Victoria and Albert Museum (Crown Copyright reserved), Augustus Egg, whose Outward Bound was recently purchased by the Ashmolean Museum and who was the first Academician to encourage the Preraphaelites, and many others.



notes were a pattern of the music of Paradise.

For artists, one place where these beliefs were developed was certainly the house of the German merchant Charles Aders, whose friends in London included Coleridge, Wordsworth, Sir Thomas Lawrence, Blake, James Ward, and John Linnell, and where German and Flemish Primitives were treasured in—at that time—one of the finest of European collections. Constable exemplifies a curious shift in the decline of this religious naturalism to the naturalism of the reed-warbler's nest. Constable had shifted on to being a *nature* worshipper, not really a worshipper of *God* through nature. He took over things which had been said before, but without the same belief. When Constable tells a woman he had never seen an ugly thing in his life—that was a change in the belief founded on Jakob Boehme's mystical view of things terrestrial as images of the perfect things in Paradise. Constable states the fact in a different way, and finds a new reason. Things can never be ugly, he says, because . . . "let the form of an object be what it may, light and shade and perspective will always make it beautiful." Or take something else in Constable: take his love of the sparkle and dewy freshness of nature. This is a new development of the sparkle, the glitter, the gleam of earthly things foreshadowing the unutterable, indescribable gleam of Paradise—the glitter admired by eighteenth century religious poets such as Smart and Cowper, to which is most certainly related the sparkle on a silk dress by Gainsborough or the shimmer of colours in many canvases by Reynolds. For Constable, Paradise has become an earthly Paradise. And here the *Æolian* Harp breaks in again. When Constable's pictures were shown in Paris, French critics said they were mere nothings, melodious nothings like the sound that the wind makes on the Harp of *Æolus*. Constable was pleased with this. He hadn't any thought, and his French critics hadn't any thought, of *Æolian* Harp music imaging the music of Paradise, or of being more by this time than just the voice of nature, which is what Constable wished his pictures to be. His clouds and light and sparkle are images of a nature worship, which helps to make the objects in Constable still, in the picture-sense, "real," and imaginative.

The process now visible—and not, of course, only visible in art—is the cooling of a religious flame, partly through science and reason, into

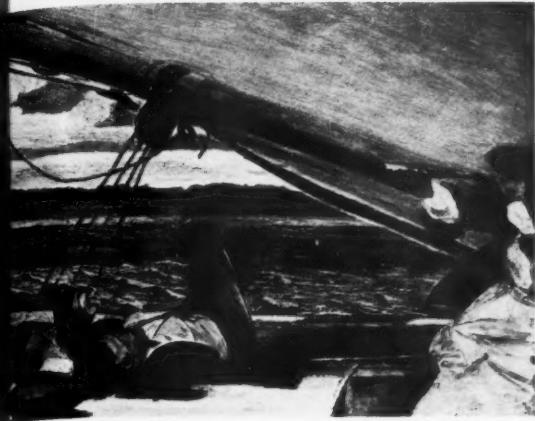
a worship of nature, from which goodness is now isolated as morality; and then a further cooling off of that worship of nature into a moral and rather witless belief in truth to nature. Mystery, too, separates from the determinate mystery of God into a belief, also rather witless, in truth to mystery. What happens now to the emotive colour of Blake, or Gainsborough, or Reynolds? Rubens must now be reproved for not seeing a rainbow in spectroscopic accuracy, and not painting it right; and a nonentity must be praised for succeeding with rainbows where Rubens failed. The scientific colour interests of Goethe had made him compile his *Theory of Colours*: now you get his book translated for artists by an artist—Sir Charles Eastlake. Now artists are to be found "wishing to substitute simple imitation for scenic effectiveness, and purity of natural colour for scholastic depth of tone." (Ford Madox Brown). Now purple comes into pictures because it is the purple of sunset true to natural facts (I should like to know three dates—the date of the first painting of purple heather on Dartmoor, the date of the first purple altar-cloths, the date of the first purple aubretia and fat purple rhododendron). Now come the hot, hard colours of the copper bowl in which the Peter of Ford Madox Brown washes the feet of Christ, and the disgrace of his turnips which "were all false in colour," and the fire-light in "Waiting" which was too red for the old dealer. Now rhapsodists and painters and poets are less imaginative than Sir Humphry Davy, the scientist, when some thirty years before he watched the glittering particles of potassium breaking through the potash crust in an act of birth; the scientist who watched the moon above an abbey sailing through the dark blue sky and felt such a sympathy with nature that he "would have felt pain in tearing a leaf from one of the trees." Now Ruskin writes grandly of light upon Swiss glaciers, but turns round through all his long—yes, his long purple passage, and asks: "Did Claude give this?" And now the Preraphaelites are born, and think themselves altogether independent of the movement of the age, of all other artists who had seen Nature about Bayswater and Hampstead and in Wales.

The Preraphaelites make, by the way, some interesting small slips of ingenuous admission. Who welcomed their attentiveness upon Nature? In 1851 Millais casually, we are told by Holman Hunt, meets John Lewis,

back after seven years in Egypt, and finding the only hope of English art in the Preraphaelite "reform." Lewis to Millais: "I am sure that oil painting could be made more delicate than either of you make it; not sufficient pains are taken to make the surface absolutely level." Who else welcomed the paintings of the Brotherhood? Other "naturalists"—old Mulready, and Linnell, and Dyce. Who else was attentive to Nature? Ruskin: "I have bought the third volume of *Modern Painters*, and mean to read it with the slowness, iteration, and thought which it deserves. I have glanced at the chapter on 'Finish,' and I see the exquisite definition of it: 'added fact.' How clear, how true! Finish, from first to last—added fact. How this leads to the great principle, *study nature*." (James Smetham). But princes of the Preraphaelite blood carefully say, *Ruskin didn't think of it first*. Who else insisted upon finish and workmanship? Coventry Patmore, who attended P.R.B. meetings, and insisted "strongly on the necessity of never leaving a poem till the whole of it be brought to a pitch of excellence perfectly satisfactory." (P.R.B. Journal, Nov. 7, 1849). Who sent Holman Hunt and Rossetti to see the brilliant colours and "Godlike completeness" of the Memlings at Bruges, and also the Van Eycks, paintings which have more to do with Preraphaelite peculiarities than any Italian painters before Raphael? Augustus Egg, who also backed them, and found a purchaser for Hunt's "Rienzi." Who else went to such an un-Italian source of finish and minuteness? Their semi-Preraphaelite friend, Ford Madox Brown, who found no better way of leading to simple imitation and pure natural colour "than to paint what I called a *Holbein of the nineteenth century*."

The Brethren, these very English brethren, illustrate, too, the big hold of morality and the separation of morality and emotion. William Michael Rossetti and Holman Hunt are both uneasy about any unqualified identification of the P.R.B. with truth to Nature:

"I will . . . take it upon me to say that the bond of union among the members of the Brotherhood was really and simply this—1. To have genuine ideas to express; 2. To study Nature attentively, so as to know how to express them; 3. To sympathize with what is direct and serious and heartfelt in previous art, to the exclusion of what is conventional and self-parading and learned by rote; and 4, and most indispensable of



the Wall (1851); the design for *Romeo and Juliet* (1852); and the amazing series of 1853, the year in which Millais fell in love with Ruskin's wife. There they are, *The Dying Man*, *The Race Meeting*, *The Blind Man*, *The Romans Leaving Britain*, the kissing angels in the psychopathic *Design for a Gothic Window, Rejected*; and above all the sexual excitement and realism and sharp loveliness of its companion piece, *Accepted*, the man on his knees, the moulded arms, the profile, the breast coming from the frock, all lighted from the drawing-room, where, beyond the lawn-roller, the men in tails prance with women in full skirts. Then comes the wedding, after Ruskin's marriage is declared null; and then, passion satisfied, the inane descent towards "Bubbles" and £46,000 a year. *That the Preraphaelites valued moral and spiritual ideas as an important section of the ideas germane to fine art is most true, and not one of them was in the least inclined to do any work of a gross, lascivious, or sensual description.* (William Michael Rossetti).

Holman Hunt would be worth wondering about, historically at least; but he strikes me as the most self-inflated, self-magnified of all the Preraphaelites. Sensuality gave Millais a short use for all his gifts, turned for a time the emptiness of nature observation into something real, erotic and captivating. Hunt had, to my eye, no such gifts, and ran painfully through a fire-mist of religion (Coventry Patmore's term for comparing the religious verse of Herbert's time with nineteenth century hymns), stretching out with his religious butterfly net, stretching valiantly out after ideas of religious banality. To his credit are a few landscapes.

Ford Madox Brown—he was of the time, not of the Brotherhood. He, indeed, felt the language of form in *Pretty Baa Lambs*, *Autumn Leaves*, *An English Autumn Afternoon*, in *Take Your Son, Sir*, and *The Last of England*. He, indeed, overcame his faithfulness to the colours of nature by his other qualities of vision, but he, too, hunts after the idea, the moral notion. Could anyone translate "Work" without his gloss: ". . . the couple on horseback in the middle distance consists of a gentleman, still young, and his daughter. . . . This gentleman is evidently very rich, probably a colonel in the army, with a seat in Parliament, and fifteen thousand a year and a pack of hounds. . . . he looks to me an honest, true-hearted gentleman (he was painted from one I know) and could he only be got to hear what the two sages in the corner have to say, I have no doubt he would be easily won over. But the road is blocked, and the daughter says, we must go back, papa, round the other way." Could anyone, without the note, trouble, from the physical paint, to work out this acrostic of brawny labour and the torn-up road separating the rich man and his child from the figures of Carlyle and F. D. Maurice?

Brown shared the taste Holman Hunt ascribed to the near Preraphaelite, Walter Deverell—"the prevailing taste among the young of that day, which Carlyle had inaugurated and Charles Kingsley had accentuated, of dwelling on the miseries of the poor, the friendless and the fallen." This leaning touched them all. But dwelling on the miseries and giving charity partake of the inane of natural observation, of application to the detail, and not vision into the cause. In 1847, the high year of the P.R.B., Herman Melville's *Redburn* was published; and there, and in nothing written and painted even in the sensual moments of a Victorian moralist, is vision, through the dockside slums of Liverpool, where Melville saw the corpse of the sailor still and stark in the deadhouse, and saw—every man his own headstone—the

name and the date of his birth tattooed upon his arm. Melville saw into London, in the opulent restaurant of variegated marbles, with the proprietor, florid and white-haired, "like an almond tree in blossom," in his rich mahogany cage; the restaurant which "echoed to the tread, as if all the Paris catacombs were underneath"—the sound "sighing with a subterraneous despair, through all the magnificent spectacle around me; mocking it, where most it glared."*

But Rossetti? I have kept him to last. For Rossetti is the man true to mystery. He is not inanely true to nature. His Brethren tried to plant him among the leaves. Millais: "Last year when I went to Knole, I prevailed upon him to come and paint a landscape background. I hoped the study this would give him would purify his conception of conventionalism, but in a few days he proved how little patience he had for any teaching but that seasoned by previous custom." Millais: "His drawings were always remarkably interesting, but I wanted to see in them a freshness, the sign of enjoyment of Nature direct, instead of quaintness derived from the works of past men." And read also Ruskin's prim, wine-dealing, well-dressed, well-to-do patron's letters about going down to Wales to do a little drawing from nature. Rossetti preferred to spend Ruskin's money in Paris. He was not true, either, to morality. The early religious Rossetti is not himself. His brother declared his early sonnet on *St. Luke the Painter* was a true early index to Rossetti:

. . . but soon having wist
How sky-breadth and field-silence and
this day
Are symbols also in some deeper way,
She looked through these to God and was
God's priest.

Some unspecified deeper way; and God is another name for mystery. Ford Madox Ford, in his excellent small book on Rossetti (that and his book in the same series, "The Pre-raphaelite Brotherhood," surpass everything else on the matter), gave as his index the sonnet *Dantis Tenebre*:

Accepting me to be of those that haunt
The vale of magical dark mysteries . . .

That was more truthful. And Rossetti was much the most frank about the things—the magic and the mysteries—that he admired. Here are some of them, as a reminder: The mysterious Bible illustrations of Isaac Taylor (well worth looking up, but the British Museum set is incomplete); John Martin; Blake (the Mystery and the Emotive Colour, that was enough); the work, not so easy to see, of von Holst, a late follower of Fuseli, and a cross according to Bell Scott between Fuseli and Retsch (some subjects by von Holst:—*Two Students Gazing at the Clock of Eternity*; *Sir Reginald Front de Boeuf ordering the Saracen slaves of the Templar to seize and throw on the flames the Jew, Isaac of York*; *Satan and the Virgin Mary dancing on the Edge of the World*); Danby (admired also by Brown and Smetham), the poet-artist who admired nature but held the mind to be a diamond in the lead setting of the body, which it helped to destroy by "its very hardness and durability." In Paris (1849–50), Rossetti admired Delacroix (Holman Hunt did not), and Géricault's "Shipwreck." Holman Hunt says that Rossetti despised science—"what could it matter, he said, whether the earth moved round the sun or the sun circled about the earth, and in the question of the antiquity of man and his origin he refused to be interested."

There is the man. "Quaintness derived from the works of past men"—well, Millais

* The passage is printed in full as this month's Anthology.



Another distortion of history in Preraphaelite writings is their unwillingness to give their due to any of the so-called minor adherents to the Preraphaelite doctrine. Of most of them it is hardly possible to see any but contemporary reproductions. Here are a few examples of their work: Arthur Hughes's *The Tryst*, recently purchased by the Tate Gallery. James Smetham's etching *The Last Sleep*, illustrated by permission of Robin Ironside, who has for years studied the Preraphaelite movement, and R. B. Martineau's *Kit's Writing Lesson* (the head-piece to this article), the photograph of which was kindly contributed by Miss Helen Martineau, who will shortly publish a detailed account of the life and work of her father.

was not far from exactitude. Rossetti earns more sympathy and more respect than Hunt or Millais. Mystery, however mysterious, induces a better understanding of how a picture is made than watching nature or chasing morals. "Your work," Rossetti wrote to James Smetham, "is of the kind that I really enjoy, because you have always an idea at the heart of it." Not on the fringe of it. But sift him through, sift Rossetti's designs—go, for instance, and see the batch by him exhibited now among the Tate acquisitions in the National Gallery—sift his poems; and the few which do not pass through like coloured dust are those in which his mystery and derived quaintness have caught a touch of his unwilling attentiveness to nature. Poems: his fragment on the merciless woman with eyes in her breasts, *The Woodspurge*, and a few others. Drawings: a few such as *Design for a Ballad*, drawings of his wife, designs for the Moxon Tennyson, and Tennyson himself reading *Maud*. Rossetti is in some ways the last twitter of Allingham's Aeolian

Harp :

What saith the river to the rushes grey,
Rushes sadly bending,
River slowly wending ?
Who can tell the whisper'd things they say ?
Youth, and prime, and life, and time,
For ever, ever fled away !

Drop your wither'd garlands in the stream,
Low autumnal branches,
Round the skiff that launches,
Waivering downward through the land of dream.
Ever, ever fled away !
This the burden, this the theme.

A wonderful man to know; but not to remember, and with more books to his memory than he deserves.

Mr. William Gaunt, to revert to the magnifying glasses round the P.R.B., has only shifted the point from which he looks through those glasses. The P.R.'s are a "tragedy"—the

big flabby word—the tragedy, he maintains, of the whole period, idealists against materialism; but he would have written a more valuable, if less smart, less library-circulating book, if he had weighed the ideals and the expression more critically (his illustrations, by the way, are all portraits of the P.R.B. circle). And historically this book by Mr. Gaunt would be more acceptable if he didn't assure us that in 1843 "The Romantics of literature and architecture had begun their protest against the formal and classic culture of which the Royal Academy was the off-shoot." The P.R. Brethren were the last ash and stump of the romantic tree; but that is not often either realised or acknowledged.

One last consideration. What about other men of the forties and fifties, what about the inclusive view? For no artists in England have trumpets ever been so loudly sounded as for the major Preraphaelites. For no other artists have letters been so well preserved, stories so thoroughly collected, lives so lengthily compiled. But only for the major Preraphaelites. What was the real stature of Collins, Woolner, Deverell, Arthur Hughes, Martineau? They are cautious and stingy with facts. Can an estimate be made of Windus and Brett, Egg—how many pictures by the major Brethren surpass the drawing and design of Egg's series of "Past and Present"? Can we be sure about Dyce, and Egley, and Henry Wallis, who painted the apt and symbolic "Death of Chatterton"? How is it that James Smetham is only a name, in spite of lavish praise of his pictures by Ruskin and Rossetti, a name supported only by a book of letters, a book of his essays, and a Methodist pamphlet in red paper covers? Smetham, I know, from seeing his etchings and some of his paintings still in his family, must be enjoyed some time or another as an imaginative artist who surpasses almost all of his time in England. How is it that Henry Wallis has been given no entry even, in the latest supplement of the *Dictionary of National Biography*?

How is it that we accept the P.R.B. silence and contempt and their dismissal of the Cyclographic Club? Burchett was a member. His lovely landscape of a cornfield by the sea in the Isle of Wight, which has been on view at the Victoria and Albert Museum during the war, entirely proves that we should know more of his work. How do these things happen? One reason is that skilful organisation of the memory of the P.R.B.—that magnifying glass technique; another is, that writer after writer has been too unadventurous or too lazy to follow the clues littered about in the P.R.B. volumes. Here, as everywhere in English art, there are conventional valuations to be rejected, pictures to be unearthed, letters and papers to be saved, books to be published, exhibitions to be arranged. Here is a country of conjectural lines, like a globe in 1550, to be explored by a new generation of art historians, for geographical and real and negative treasures. Mr. Gaunt's book is like a mediæval bestiary compiled from the best sources; but it's about the last Preraphaelite compilation that can really be accepted in patience.

PATIENT PROGRESS

the life work of Frank Pick



By Nikolaus Pevsner

If we remember the reluctant scepticism which has delayed and is still delaying modern architecture and design on its way into and through England, the consistency of the London Passenger Transport Board in developing a strictly modern idiom of the greatest aesthetic integrity for its buildings, equipment and rolling stock is both surprising and highly encouraging. Here, obviously, enterprise and perseverance have been at work, logic and discipline, civilized urbanity and humane commonsense. And here consequently an orderliness and unpretentious harmony have been achieved on which the eye does not tire to rest, a style as near in spirit to that of Gray's Inn, the squares of Bloomsbury, early Wedgwood coffee sets and Georgian cutlery as our age can hope to get.

That all this is so, that the L.P.T.B. stands for an architecture unequalled by transport design in any other metropolis, and that it has by means of its buildings and publicity become the most efficacious centre of visual education in England, is due to one man. Without Frank Pick, London's transport system may have developed into something no less extensive and well-working than we know it to-day (although this is doubtful, too), but it would certainly not be the civilizing agent—to use Christian Barman's happy expression—that it is.

The L.P.T.B. was founded less than ten years ago, as the head organization of all London's transport concerns. The Act of Parliament creating it marked the end of a long development towards concentration. Here are a few dates to recall it:

- 1829 Shillibeer's first horse buses from Marylebone to the City
- 1829-1843 Brunel's first Thames tunnel
- 1850 first buses with roof seats
- 1853 foundation of the "Metropolitan"
- 1855 foundation of the Compagnie Générale des Omnibus de Londres in Paris, the later London General Omnibus Company, or "General." (The General gradually bought out most of the small enterprises running bus services)
- 1868 opening of the Metropolitan from Baker Street to Swiss Cottage
- 1868-74 gradual opening of the District from Hammersmith to Mansion House
- 1870 first horse-drawn trams (all trams were later acquired by the L.C.C.)

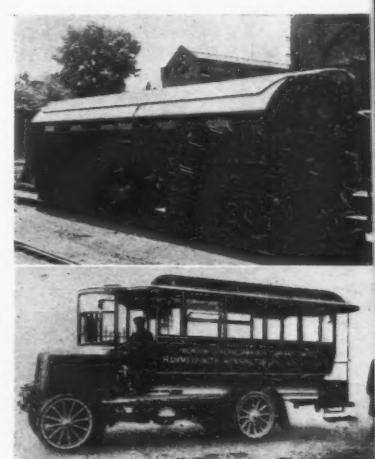
- 1890 opening of the first tube: the City and South London Line from Monument to Stockwell
- 1897 first motor buses
- 1900 opening of the Central London Tube from Shepherd's Bush to the Bank
- 1900-1907 gradual extension of the City and South London Line from Clapham Common via Bank to Euston
- 1900-1907 gradual opening of the Hampstead Tube from Strand to Highgate and Golders Green
- 1901 first electric trams
- 1902 incorporation of Underground Electric Railways Ltd., a holding concern controlling the District and since 1910 also the Bakerloo, Piccadilly and Hampstead Lines
- 1904 first covered top tram cars and first General motor buses
- 1906 opening of the Bakerloo Line and of the Piccadilly Line from Hammersmith to Finsbury Park.

In 1906 Sir George Gibb became general manager of Underground Electric Railways. He had been with the North Eastern Railway before, and brought with him as his assistant Frank Pick, then twenty-eight years old. In 1907 Pick was transferred to the staff of Mr. Stanley (now Lord Ashfield), who at once recognised his latent genius. In 1909 he became Traffic Development Officer, in 1912 Commercial Manager. In the same year his company assumed control of the "General," in 1913 of the Central London and the City and South London lines. So by then unification was well on its way. Frank Pick was made Joint Assistant Managing Director in 1921, Assistant Managing Director in 1924, and Managing Director in 1928. Meanwhile the Underground Common Fund had been established in 1915 (pooling of receipts of all the members of the Underground group and distributing of funds on an agreed percentage), the Ministry of Transport had been founded in 1919, the Railway Act had concentrated the railway system into four companies, and the London Traffic Act of 1924 had made more drastic changes in the administration of metropolitan transport possible. The result was the formation of the L.P.T.B. in 1933. Frank Pick was its Vice-Chairman from 1933 to 1940.

His task in developing, under Lord Ashfield, an organization which carries every day as many

passengers as the whole population of Canada, and employs a staff of over 75,000 was formidable. He proved equal to it in whatever emergency. So at least friends and respectful foes assure you. The quiet mastering of rush work from morning till evening had to him become a matter of course, long before his responsibility covered the whole of London's transport policy, and left a surplus over superior to the sum total of many a successful man's energy. How he employed this surplus and for what reasons he employed it, as indeed he did, it will be for the following pages to show.

In his last years, disappointed but wise, he knew what he had been working for all his life. How far he had a clear picture of his aims, when at the age of twenty-four he entered the transport business, must remain doubtful. Yet he could not have chosen a more promising field, had he selected it in the full light of future understanding. Transport caters for all, transport organization and transport design affect all. Moreover it is modern enough a trade not to be encumbered by outworn traditions, and hence easily spurred to adventure, technically, and aesthetically, too. Thus the very first tube ever built, the City and South London one of 1890, illustrated on this page, is of a functional soundness of design, untouched by any but engineering considerations, which it took



London transport design of pre-Pick days: the first tube ever built, one of the City and South London all-teak coaches of 1890, straightforward and excellent in appearance, and one of the 1904 "General" buses.



Nineteenth century station architecture. Chiswick Park should be compared with the new building of 1932, illustrated on page 39.



Pre-Pick station architecture of about 1905-1910. The feeling for architectural responsibility was there, but nobody to guide it and nobody to satisfy it according to the highest standards of the day. The original Piccadilly Line stations have some Art Nouveau decoration all right, the contemporary Metropolitan stations some pleasant Neo-Palladianism, and the Golders Green Station some country Neo-Georgian, but neither is the one of the Townsend, nor the others of the Lutyens or Ernest Newton standard.

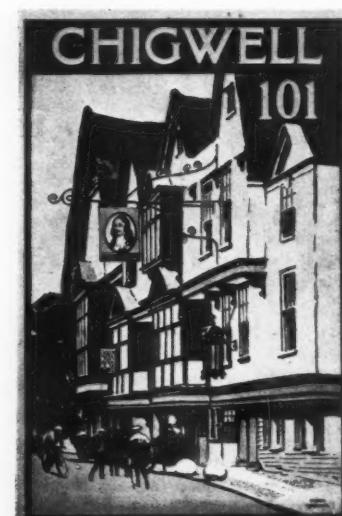
Frank Pick a good deal of effort, twenty-five years later, to reintroduce and improve upon. The same is true up to a point of the earliest "General" motor buses of 1904. But it is not true of station buildings. Here, where the engineer was unconcerned, the meanest of architecture was still accepted as a matter of course. Improvements had, however, begun before Pick appeared, and it is historically entertaining to note the Art Nouveau ornament on some of the original Piccadilly Line stations (*sang-de-boeuf* faience), the subdued Palladianism of the early twentieth century Metropolitan stations (white faience), and the then very up-to-date brick Neo-Georgian of the Golders Green station of 1907 (see photographs on this page).

Two years later, in 1909, Frank Pick was promoted to the post of Traffic Development Officer of Underground Electric Railways. His job does not seem to have been clearly defined. It was apparently meant to cover anything that this young man might choose to undertake for the development of transport: the planning of new routes as well as improvements to, and publicity for, existing ones. There was no separate publicity department, and so for the first ten or fifteen years of Pick's activity in London, the time, in fact,

until he became Assistant Managing Director and then Managing Director, publicity absorbed most of the energy left over from the daily routine of a prodigiously growing combine.*

The art of the poster and the art of lettering were the first that he tackled. Here he won his spurs as a patron. It was a sound start, for the English poster as well as English lettering had achieved a remarkably high level. Pick could here build on a firm foundation. Since the Beggarstaff Brothers had created their style of bold, flat surfaces and simple clear colours in the mid-nineties, and since Morris's Kelmscott Press and Emery Walker's Doves Press, the posters and presswork of England had been accepted as leading by the other European nations.

Among the artists who designed posters for the Underground between 1908 and the last war, Fred Taylor and Gregory Brown are the most notable. Their work, especially that illustrating the London countryside is of an excellent standard, sound, forcibly telling its story, and no doubt convincing to the man in the street. Pick might



Fred Taylor: Underground poster of 1914.

have kept to this type of poster for many years, as the railways did, if his had been exclusively the point of view of the salesman of transport commodities. But it was not. He for his part, in an article in *Commercial Art* (vol. 2, 1927, p. 187) insisted that it was, and that the only difference between his attitude and that of average salesmen was that he took a slightly wider view, rating more highly "the establishment of goodwill and good understanding between the passengers and the companies." Thus, one surmises, Pick must have talked to his directors and others whom he regarded it as expedient to convince. But could they not have answered that, if goodwill was all he was after, he should have stuck to the poster style of 1910? What happened instead was that he met younger artists, saw them struggle for new and less easily appealing ideas, and decided to support them in their honest struggle, although his own balanced and weighty mind must often have doubted the revolutionary methods which they favoured. So McKnight Kauffer appeared on the scene in 1915, 1, at first sight none too different from Taylor, though evidently bolder and more sweeping in his stylization. What is only just discernible in his poster of 1915 had, by 1924, become the all-pervading quality of his art. His posters, 3, and those of a few others, such as Austin Cooper, 2, looked in 1924 already exactly like the kind of thing that we are now used to calling "Paris-1925," rather wild and jazzy, but exciting and stimulating. And still Pick supported them. Here for the first time in his career the business man in him came up against his real self, the educationalist; and the

* And he got together the most admirable publicity department with exact photographic records of every notice, every poster, every piece of equipment, every architectural detail ever carried out. It would have been out of the question for me to compile this article without its help. I am especially grateful to Mr. Carr, Mr. Howells, Mr. Patmore and Mr. Burgess at 55, Broadway, and to Mr. Graff Baker at Acton and Mr. Blair at Chiswick.

business man was defeated—to the extent that McKnight Kauffer's mature and even more daring posters, 4, appeared more frequently on L.P.T.B. hoardings than those of any other artist. Whether Pick was at that time, or ever, conscious of this educational bias or not, it can safely be said that no exhibition of modern painting, no lecturing, no school teaching can have had anything like so wide an effect on the educational masses as the unceasing production and display of L.P.T.B. posters over the years 1930-1940, 5-8.

However, there is one other field in which Pick's influence has been even more universal. It is lettering. The story is this (see the illustrations on the facing page): The Victorians, while abandoning the quiet distinction of English eighteenth century printing for a more florid and finicky ornamental kind of lettering, had, forced by the rapid growth of advertising, devised display types quite new and as daring as their contemporary architecture in iron and glass. Such were—I am following Nicolette Gray's delightful book on *Nineteenth Century Ornamented Types and Title Pages* (Faber and Faber, 1938)—the Egyptian or Antique with bold letters of even thickness throughout and heavy slab serifs, the Fat Face with very thick strokes and exaggeratedly thin serifs, and the Grotesque with no serifs at all. The latter became popular very suddenly during the thirties. Even a lower case appeared as early as 1834. Of these new types the Egyptian was the most original, strong and full of character, but the Grotesque possessed the highest readability and directness of appeal for large scale work.

When Pick took over, Grotesque was the favourite lettering of the Underground lines. Examples can still be seen in some of the unrefined stations, such as South Kensington. There were cruder and more refined Grotesques, and Pick was careful to choose the best that were available. Beyond that at first he did not go. A good Grotesque was a sound, clear, reasonable letter. But by degrees, as his sensibility sharpened and his experience widened, he realized that Grotesque had certain deficiencies which he felt it his duty to overcome—again not because they were in the way of sales, but because they jarred on his sense of harmony and orderliness. Grotesque had no module to regulate depth and width. If this could be introduced, a happier balance would be attained. So, about 1912 or 1913, he began to play with compasses and ruler, trying to work out a new type face. He could not succeed, because he was not an artist. But he busied himself sufficiently to know precisely what he wanted. He also discussed his ideas freely with men who knew more about lettering and printing than he did. It was Mr. Gerard Meynell apparently, then of the Westminster Press, who had also taken an active part in enlivening Underground posters about 1914, who first suggested Edward Johnston as the right artist to satisfy his wishes. He introduced Johnston to Pick, and with that flair that had made him recognize McKnight Kauffer, Pick entrusted the job to Edward Johnston.

Johnston worked on the script for a long time. When it was at last ready in the summer of 1916 (in capitals as well as lower case), it was far more harmonious and balanced than Pick can have visualized during the preparatory stages—a truly twentieth century Sans, logical and consistent, based as far as possible on squares and circles, and thus of convincing and restful proportions, 9-14. It was meant from the beginning as a display type. No font of it exists smaller than 36 point, i.e. $\frac{3}{4}$ " letters. For text printing it has never been extensively used. It was, of course, confined to the L.P.T.B.† Hence its effects could not be instantaneous. But they must have been strong all the same. We can first discover them in Central Europe, just as Mackintosh influenced Austria before he acted on Britain. In Germany especially, where the years 1922-28 had brought a

† I am greatly indebted to the L.P.T.B. Publicity Department for having enabled THE ARCHITECTURAL REVIEW to print the title to this article and the sub-titles on the illustration pages in Johnston Sans. My thanks are also due to Mr. Noel Rooke, Mr. Gerard Meynell and Mr. Harold Curwen for information concerning the history of Johnston Sans.

most exciting revival of Egyptian and Grotesque, some of the best new sans serifs can hardly be understood except as the result of a careful study of Johnston Sans. While these new German type faces, however, appealed only to a very small section of the printing trade in their own country, and a smaller still over here, things changed to a degree and at a speed not experienced in printing for a long time, when Eric Gill created Gill Sans for

AMERICAN AND CONTINENTAL

Grotesque No. 8. From Waterlow's type-book, 1910.

ABCDEFGHIJKLMNPQRSTUVWXYZ
YZ abcdefghijklmnopqrstuvwxyz

Johnston Sans. Designed in 1916.

ABCDEFGHIJKLMNPQRSTUVWXYZ
YZ abcdefghijklmnopqrstuvwxyz

Gill Sans. Designed in 1928.

the Monotype Corporation in 1928. This machine-set type, both modern and pleasing, became in a few years the favourite with all those who were or wanted to appear modern-minded. It has kept the field ever since without any serious competitor and will no doubt, for the historian, be one day the hallmark of 1930-40 publicity. And since Gill frankly admitted that his alphabet was not more than a judicious revision of Johnston's, and Johnston might never have started on his but for Pick's initiative, it is no exaggeration to say that Pick's vision had changed the face of British printing.

As for architecture, he was to play a part hardly less important, though important in a different way. But that was fifteen years later. The station buildings of the Golders Green-Edgware extension, gradually opened in 1923-1924, 15-18, have a pleasant but not very exciting appearance. No attempt was yet made by the company's architect, Mr. S. A. Heaps, to get beyond accepted Neo-Palladian forms.

Then the southward extension of the same line to Morden was built (1925-1926). Here the engineers have more interesting solutions to spatial problems (e.g., the octagonal booking hall at Morden disguising the odd angle of track and main street). As for the facades of the station buildings, a new architect now introduced new forms, as bold though not of as undated a beauty as Johnston's lettering, 19-22. Pick had met Charles Holden on the committee of the D.I.A., and had, with his insight into human qualities, sized him up as rightly as he had sized up Johnston and McKnight Kauffer. Mr. Holden for this first batch of station buildings designed a standard pattern adaptable to as many modifications as the various sites required. Its bare white walls of Portland stone and unrelieved angular concrete cornices, and its curious pillars crowned in lieu of capitals by balls with horizontal slabs across are a highly original expression of the 1925 spirit—more progressive than any other contemporary English building except Adelaide House.

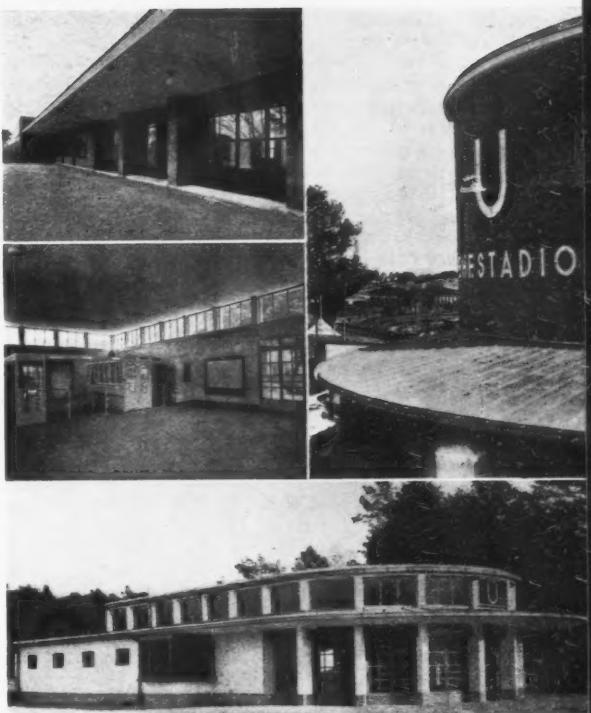
Shortly after the completion of the Morden line, Mr. Holden was at Pick's request entrusted with the plans for the Underground headquarters building in St. James's. Since, however, this has been fully discussed and illustrated by THE ARCHITECTURAL REVIEW in 1929 (vol. 63), war conditions do not allow me to analyse its forms and its historical significance again in this changed context. The only point that must be made is that, if Pick had not felt visual education to be his foremost human duty, he would not have ventured to shock the London public by architecture so opposed to anything then familiar, and by sculpture so violently uncompromising that it has even now, after more than twelve years, not ceased to scandalize the very classes that Pick, the salesman of transport commodities, catered for. As for the sculpture, Epstein's in particular, he did not at first like it himself. But Mr. Holden convinced him, and, once he was convinced, he supported it and had his way.

As soon as the many problems concerning the Underground Building were solved, a new job on an equally large scale turned up. It had been decided to extend the Piccadilly line. Stations in the west had to be remodelled to take tube trains, and new ones had to be built from Finsbury Park to Southgate and then to Cockfosters. They were situated in surroundings far more countrified than those of the Morden extension. Pick felt that therefore a different type of building was required. But what should it look like? Much thought was given by Mr. Holden and Pick to this question, and, since lately the architectural papers had said much and shown a little of a new style developed in Sweden, Denmark, Holland and Northern Germany, Pick went on a journey there with Mr. Holden (June 20—July 7, 1930). They were impressed by what they saw, but did not lose their heads (see their illustrated report to the Company, printed for private circulation). What they liked and what must have influenced their future attitude towards building was the simple, comfortable and civilized new brick buildings of Sweden, Holland and Hamburg (neither Höger's teutonic romanticism of the Chile House, nor Dudok's Dutch romanticism of the Hilversum town hall). This style they recognised as suitable for English surroundings and in accordance with English traditions.

They did not go on from Hamburg to Berlin, where they might have seen the then most up-to-date transport architecture of Europe. Alfred Grenander's underground extension had been designed in 1929 and was opened in 1931. It is interesting to compare his buildings (shown on this page) with Mr. Holden's. The general appearance is strikingly similar, but detail in Berlin is less personal and less sensitive.

When a general idea had taken shape in his head as to what he and Mr. Holden wanted to convey in the new stations, Pick suggested taking one of the buildings to be re-done along the South Harrow-Uxbridge line and erecting it as a complete sample. Sudbury Town was chosen. It was begun on December 13, 1930, and opened on July 19, 1931, 23-26. It is a landmark not only in the history of Pick's work but also in that of modern English architecture. For it should not be forgotten that by then the new Continental style, shorn of its Paris 1925 or Dudok or German expressionist excrescences, had no representatives at all in this country, except for Peter Behrens's New Ways at Northampton, built in 1925-1926 for Pick's friend, Mr. Bassett Lowke, Mr. Etchells's premises for Crawford's of 1930 and Trent and Lewis's Victoria Cinema of the same year. Moreover, Sudbury Town had nothing tentative or demonstrative. It is natural and easy, precisely right in its proportions and thoroughly functional in its layout. Its completion marks the opening of the "classic" phase of underground architecture; 1930-1935 can be considered the "classic" years.

Sudbury Hill, Alperton and Acton Town on the same line followed immediately, 27, 28, 39, and then in 1932-1934, Manor House, Turnpike Lane, Wood Green, Bounds Green, Arnos Grove, Southgate, Enfield West and Cockfosters; and, towards Hounslow: Chiswick Park, Acton Town, Northfields, Boston Manor, Osterley and Hounslow, 30-37, 45-48. Rayners Lane and Park Royal on the Uxbridge branch came a little later. Some of them were carried out under Mr. Holden's immediate control, others by Mr. Heaps; for Enfield Mr. Holden worked with Messrs. James, Bywaters and Pearce, for Rayners Lane with Mr. Uren. The plans of all these stations are dictated by function, by the lay of track and adjoining streets, by necessary subways and the stream of passengers in and out. This also determined their general shapes, a central cylinder here, a curved front there, a rectangle along the street, or right across the track in other cases, or again a narrow rectangle to cover the distance between the required site for the station and a main road not in its immediate neighbourhood. The repertory of forms used, on the other hand, was kept very much the same for all of them, once it had been found and found good. Sometimes, but only rarely, this sameness appears a little dull especially in later buildings such as St. John's Wood, no longer handled with the delicacy of



Alfred Grenander's Berlin Underground extensions of 1929-1931, the best European transport architecture, when Charles Holden created the classic L.P.T.B. style. He did not know Berlin, though his buildings are strikingly similar. The same function had led to the same features.

Mr. Holden's own touch, 42. Sometimes, on the other hand, but again far from frequently, attempts were made to brighten up the buildings by novel and more lighthearted features such as the towers of Boston Manor and Osterley, 43, 44. This could not be successful, for the very forte of this style lay in its quiet and sound perfection. The brilliancy of Tecton was inaccessible to Pick and bound to displease his educational mind.

Parallel with the architecture of station buildings there ran a great deal of other major and minor architectural work, office buildings on station sites, such as Leicester Square and Warren Street, 40, 41—both rather uninspired—underground booking halls such as Leicester Square and Piccadilly Circus, 51, platforms below and above ground, 57, 62-67, the latter of a clearly visualized and expressed brick or concrete character, and all such details as subway entrances, lighting standards, platform seats, clocks, kiosks, ticket machines etc., 81-90, down to the five-foot tall concrete posts holding the cables along the lines. Even they were designed by Mr. Holden. The same style was also adopted for bus and tram architecture: country coach stations, garages, shelters, waiting-rooms and the like, 70-72, 76, 77. There again a vast variety is happily combined with a general unity of idiom. The L.P.T.B. style is everywhere at once recognizable—the first principle of sound publicity—but the forms chosen never seem imposed upon the expression of the functional peculiarities of a job. Nor were designs, in cases where jobs were identical in their functions or had to be repeated very often over a number of years, allowed to become stagnant. Patient research went on all the time, guided and supported by Pick. A characteristic example is afforded by the bus stop signs, 91-94. Nothing more than a post and a sign were required. The sign had to be conspicuous and easily legible. But the post should, according to Pick's vision, be more than just a post. It should at a glance appear the modest representative of an organization promising comfort and visual pleasures. So here the question of decoration came in, a question that occupied Pick's mind a lot, especially in later years. The

experiments with ornamental tiles and plaques, 99, 100, on some platforms are one proof of this, and the drive for better upholstery materials for tubes, buses and trams, that went on during Pick's last year or two with the L.P.T.B., 101, 102, is another. He could easily find out the best textile designers—having for years been the Chairman of the Board of Trade Council for Art and Industry—and he chose those who did not only think in terms of designing on paper, but knew enough of industrial production. His correspondence with artists and manufacturers is highly instructive. In spite of all his administrative work he took no end of trouble in explaining everything to everybody concerned and coaxing everybody into doing what he wanted. His patience in such cases was prodigious.

More instructive still as an illustration of this faith in patient progress is the history of the L.P.T.B. rolling stock from 1907 to 1940. As to tubes and surface trains, 103-111, the wooden Piccadilly Line coaches of 1907 were by no means bad. They could be kept unaltered for many years. The new all-steel type of 1920 has a section giving wider foot space and a better arrangement of the doors. Since then the development of the coaches (designed by Mr. Graff Baker) has consistently been towards flush surfaces instead of beaded panels, wider door areas (they are now up to twenty-five per cent.) and window areas, and inside a binding of all fittings into the architectural composition. The result of 1938 puts the Paris Métro to utter shame, and makes the Berlin U-Bahn appear heavy and pedestrian.

The same exactly is true of buses and trolleys, 112-123. Up to 1923 no change of aesthetic significance is to be noticed. Then the tidying up began. The NS type could, thanks to the provision of a lower centre of gravity, have a covered upper deck. It also has a more orderly grouping of parts along the back end with its open staircase, and a cleaner treatment of the radiator and the canopy to the driver's seat. LS and LT (1927-1930) had sixty instead of fifty seats, six wheels and sprung seats. Enclosed staircases came in at the beginning of 1931. The ST of 1930 is a smaller type and on the whole very similar to the LS. The canopy in the front, however, is more satisfactory in outline, the route number is in a more organic position, and the relation of window to body is brought more into accordance with Pick's changing architectural views. These come out, however, more clearly in the first experimental design for a trolley bus. It dates from the year of Sudbury Town—1930—and shows an immense advance over all the previous buses. Tram cars in Copenhagen had especially impressed him. The details of the front should be noted in particular, and the curved window above the staircase. The STL buses of 1933—fifty-six seat four wheelers—adopted most of the innovations of the first trolleys. Tubular metal seats were introduced in 1934. Since then—in the seventy seat trolleys of 1935 and the RT buses of 1939—this new flush and crisp design is essentially kept, though minor improvements were still made. They will be found in wider windows with fewer separating pillars, more curves, the placing of route number and route indicator, and the details where body front, driver's seat and radiator meet.

And while patient progress thus gave the public ever better and ever more pleasing vehicles, Pick did not take less interest in design for vehicles, buildings or pieces of equipment which did not concern the public at all. In the case of the overhead wire lubricating cars, 124, one can perhaps argue that the public sees them and in fact likes looking at them, and that therefore their beauty of shape and cleanliness of surface will be an asset from the business point of view. This does not, however, apply to the interiors of

sub-stations, signal cabins, factories and workshops, 78-80. Here the only people to benefit by care for interior beauty are the employees of the Board. Yet Pick was anxious to give to the places, where they work, just as much beauty as to the places of daily communication between the passenger and the Board.

In this more than anything else Pick's attitude comes out as that of the reformer. His primary impulse was a desire for honesty, harmony and order. Others might help to bring a more honest and orderly world into being by political and social measures. If they did not sufficiently try to, if they seemed to lack honesty or accuracy or discipline, he was scandalized. Hence his failure at the Ministry of Information. What he had forgotten in taking up the job of Director-General there, was that the L.P.T.B. had made him happy only in so far as (and as long as) it had given him a free hand to combine large scale organization and administration with large scale propaganda for the visual expression of honesty, harmony and order. He thought in terms of visual propaganda whatever he did. His new buildings, his rolling stock, his innumerable pieces of excellent industrial design, helped to make streets better and ultimately towns better. This and this alone was their *raison d'être*. For better towns stood always before his mind's eye, towns more beautiful and more orderly, and also more human than any of to-day, true communities in shape and social structure, which their citizens would be proud to serve.

He wrote two pamphlets at the end of his life, which it is necessary to know, if one wishes to understand his mental make-up. One is called *Britain must re-build* (Routledge, 1940), the other *Paths to Peace* (Routledge, 1941). Here are a few sentences from the later of the two: "If we are to achieve our hopes and forge the armour of light, everyone will have to work for the community in some way or other for nothing. What we seek can only be gained by voluntary work, which is work of love. . . . What excuse is there for relieving anyone of his share of tidying up his street; protecting his park or public garden; caring for his neighbour in misfortune; watching against abuse amongst those in authority; doing something to beautify and adorn his surroundings, which all may share. . . ."

Now this is immensely revealing. It is a religious mind that speaks, developed in the puritan atmosphere of England, but freed from puritan fetters by a new humanism and an utterly unpuritanical love of visual beauty. Frank Pick was made of the stuff of Carlyle, Ruskin and Morris: energetic as they were, passionately educational as they were, always in earnest as they were, and also a little heavy-handed as they were, and as you must be, if you want to move masses. He has been called a dictator. He has been called cruel and formidable, reserved and aloof. He was nothing of the sort. Those whom he liked and respected knew him as generous, open and exceedingly lovable. And as to dictatorial appearances, he only shared the dictator's drive and the dictator's faith in order. But no dictator has ever been a humanist. A dictator need not be like Hitler. He can have a high moral goal. He can devote himself—this is Cromwell's case—to forcing men into living better lives. He does not care, however, for lives and men to be happier in this world. In this Pick was just as unpuritanical as in his delight in architecture and design.

However, he was too sharp-sighted a man to overlook the fact that while the passenger appreciated a smoothly working transport system and grumbled if he did not get it, he did not quite so readily appreciate the improved beauty of a ticket machine. If in spite of that Pick insisted to

such a unique extent on giving him beauty in buildings, equipment and everything, he did so because of his faith in the ultimate soundness and goodness of human nature. If the man in the street—and Pick regarded himself entirely as one of them—could not at once see the ethical, the vital value of these improvements, he must be made to see it, gently but firmly. To surround him with the right things was, of course, the best approach to visual education. But exhibitions had a job to do, too. The D.I.A. had convinced him of that, and so, in 1932, he allowed the D.I.A. to show a selection of exemplarily designed British goods in the Charing Cross booking hall. It was followed by exhibitions of L.N.E.R. and then of S.R. posters, Shell-Mex posters, Design in Modern Life (D.I.A.), New Houses for Old (Housing Centre), Noise Abatement, Milk Marketing, the workings of the G.P.O., the evening classes of the L.C.C., the Highway Code, the *News Chronicle* better schools competition, the work of students of the London Central School of Arts and Crafts, Smoke Abatement, the Green Belt projects, etc. Now it would certainly be reasonable to say that a station hall where nobody goes but in a rush is not a suitable place for exhibitions. Yet Pick, the educationalist, felt the need for small, free, popular exhibitions on such themes, and so Pick, the patron, made them possible.

For he was, to add a last word, the greatest patron of the arts whom this century has so far produced in England, and indeed the ideal patron of our age. Mr. Christian Barman in his obituary in the January number of THE ARCHITECTURAL REVIEW said that Pick had been described "as a modern counterpart of Lorenzo the Magnificent. . . . But the novel and remarkable thing about him is just that he was the very opposite of a Lorenzo. You could apply the term Lorenzo very aptly to Mr. Jack Beddington or to Sir Kenneth Clark. To both these men the art they serve is the main thing. . . . To Pick, art was always a means to an end. . . ." Quite true—but so it was to Lorenzo the Magnificent. The end then was personal enjoyment and self-glory. Patronship with such an end is no longer possible to-day. Granted that Sir Kenneth Clark probably derives a kind of intense joy from the works of Henry Moore that would have been inaccessible to Frank Pick, even he as a patron buys mainly with public funds for a public purpose. No—if a Lorenzo can be conceived nowadays, it can only be in terms of big business or big administration, in terms of no leisure and no private glamour and also—and this is perhaps the most important point of all—in terms of architecture with all the other arts serving her, and thus serving the community.



Design in British Goods, a D.I.A. exhibition held in 1932 in the Charing Cross booking hall, one of the many that Frank Pick sponsored to promote beauty and civic dignity.

Posters and Lettering

Frank Pick joined the London Underground in 1907. In 1909 he was made Traffic Development Officer. Advertising existing transport commodities he regarded as part of his job. There was no separate publicity department. He built one up, more complete, more versatile and more educationally effective than any. Underground posters and Underground lettering created a new standard of live and balanced publicity.

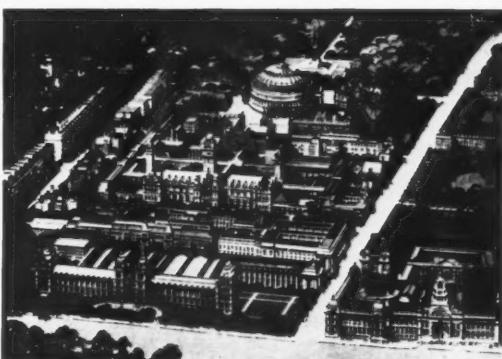
TWENTY YEARS OF UNDERGROUND POSTERS. The standard of poster art in England was remarkably high about 1910. Frank Pick could build on the firm foundation laid by the Beggarstaff Brothers during the years just before 1900. From the beginning he employed the best artists, men such as Gregory Brown and Fred Taylor. His flair for new men was remarkable in commercial art as well as architecture. When Mr. McKnight Kauffer first appeared on the Underground hoardings in 1915, 1, his style seems still that of the decorative landscape poster of 1910, not strikingly different from that of Fred Taylor. However, he stylises more boldly. In the background of 1 the forms of the trees are reduced to abstract shapes. Thus, a few years later, he—and a few others such as Austin Cooper, 2—created a poster cubism, anticipating what was so wildly commercialised after the Paris Exhibition of 1925. 2 dates from 1924. So does the jagged, somewhat jazzy McKnight Kauffer poster 3. By 1927 Kauffer had achieved his mature style, of which an exquisite example of 1932 is shown 4, a very personal adaptation and development of certain hints in Picasso.

THE JOLLY AND THE AUSTERE. Pick was decidedly catholic in his taste in posters. He knew for how many classes of people transport caters. And he knew that for every one of them something could be offered that was suitable. 5 is by Austin Cooper, 6 by McKnight Kauffer.

REALISM AND EXPRESSIONISM. Fred Taylor gives an air view of the Kensington Museums, 7, true to nature, yet with the experienced practitioner's almost unnoticeably added charm of a close-knit pattern. The majority of Frank Pick's customers will no doubt have preferred this poster to Epstein's Epping Forest, 8. Yet Pick, whose orderly and harmony-seeking mind had at first rejected the violence of Epstein's work—Charles Holden had to convince him, before he accepted and indeed strongly supported Epstein's figures for the Underground headquarters in St. James's—saw the usability of Epstein's water-colours which were exhibited in 1934 and bought and printed one of them.



5,6



THE MUSEUMS KENSINGTON



EPPING FOREST

7,8

THE JOHNSTON SANS. In one branch of his design and publicity work, Frank Pick brought about a real revolution. The Johnston Sans Serif type, 9, designed by Edward Johnston for Pick in 1916, is the immediate and often almost identical example of Eric Gill's Monotype Gill Sans of 1928, and Gill Sans is the type used for a large proportion of modern display lettering, most of to-day's official notices put up by contemporary-minded public authorities, plenty of commercial letter-headings, plenty of pamphlets and leaflets. They all would look quite different from what they are now, if Pick had not commissioned Johnston to design his Sans Serif. Pick had seen that Sans Serif letters were the most readable in existence. The Underground used Victorian Grotesques for the purpose, when he came, 10 and 12. In about 1912 or 1913 he started working out the possibilities of a more balanced, more logical, more harmonious Sans. Not being an artist, he could not succeed. He discussed his views with men more experienced than he, especially Mr. Gerard Meynell, then of the Westminster Press. Mr. Meynell suggested Edward Johnston to him as the best artist in this field. Pick saw Johnston, and the result is a type-face perfect of its kind, and equally suitable for station names, 11, route diagrams, 14, direction indicators and the like, and for posters, 13. Station names, by the way, were originally written across a plain red bull's eye. Then the subtler, less cumbersome looking ring was designed. Again Pick had a hand in this. He had seen the triangle of the Y.M.C.A. and asked for something of that quality, but more balanced. Edward Johnston supplied it.

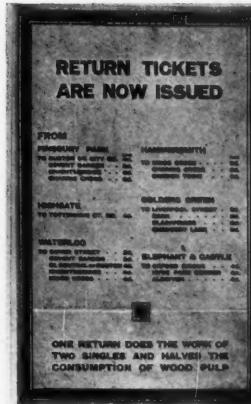
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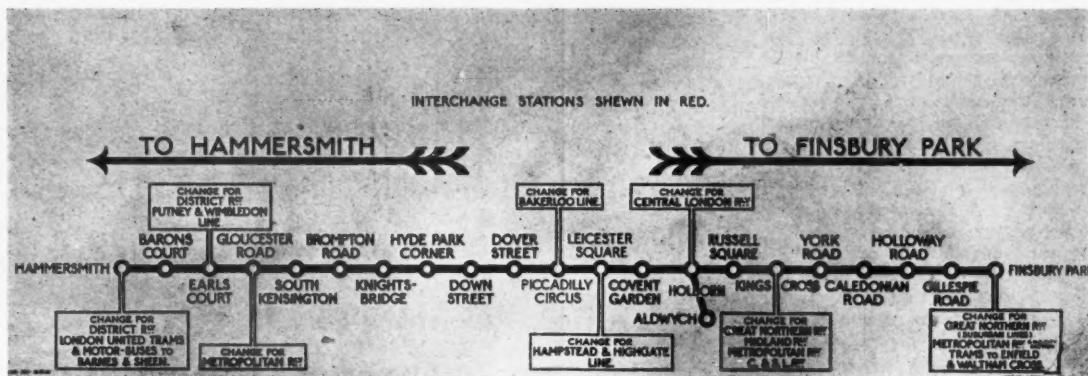
11



12, 13



12, 13

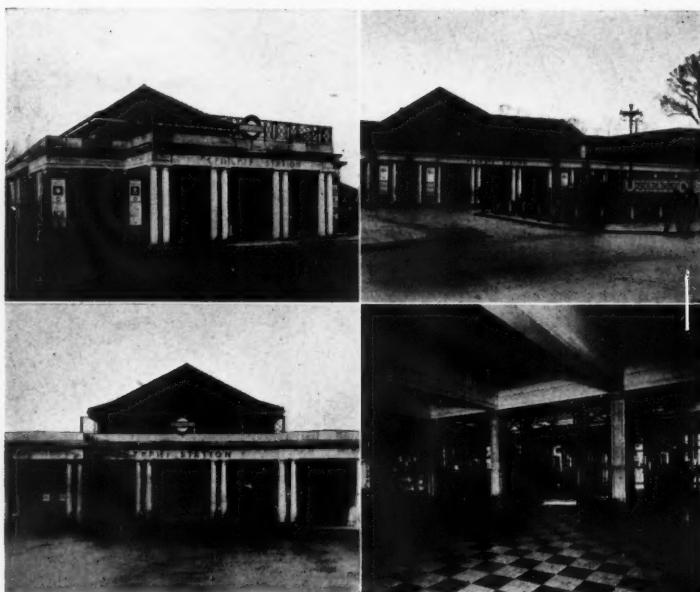


14

2 Stations

The L.P.T.B. style in architecture is the joint achievement of Charles Holden and Frank Pick. The sensitivity of the one, the educational impetus of the other, and the strict honesty and faith in human nature of both, created it. It is a style as quiet and unostentatious as that of Grays Inn and the squares of Bloomsbury, and just like that predecessor style suitable for infinite variations, while keeping to a static modulus of values and forms. It is never glamorous and never what the Pre-Raphaelites called stunning. It can occasionally be even a trifle dull. But that one might apply to Bloomsbury as well. What matters is its prototype value; educationally, it has been more effective than any other English buildings designed between 1930 and 1935.

THE EDGWARE EXTENSION of the Northern Line dates from 1923-1924. The stations, 15-18, are designed by Mr. S. A. Heaps in a pleasant Neo-Palladianism, superior to what the Underground had put up before, but far from revolutionary.



15, 16

17, 18

THE MORDEN EXTENSION of 1925-26, marks Mr. Holden's appearance on the scene. He designed a pattern that was, with slight modifications, usable on station sites of widely varying form, 19-22. It consists of a slab-like Portland stone wall with unmoulded cornices and a wide window opening divided by curious pillars with balls instead of capitals. The forms used are as modern and as personal as those of McKnight Kauffer's and Austin Cooper's contemporary posters. They appear dated, that is now somewhat out of date. But when they were designed there was only one building in London equally unafraid of non-period adventure: Adelaide House.

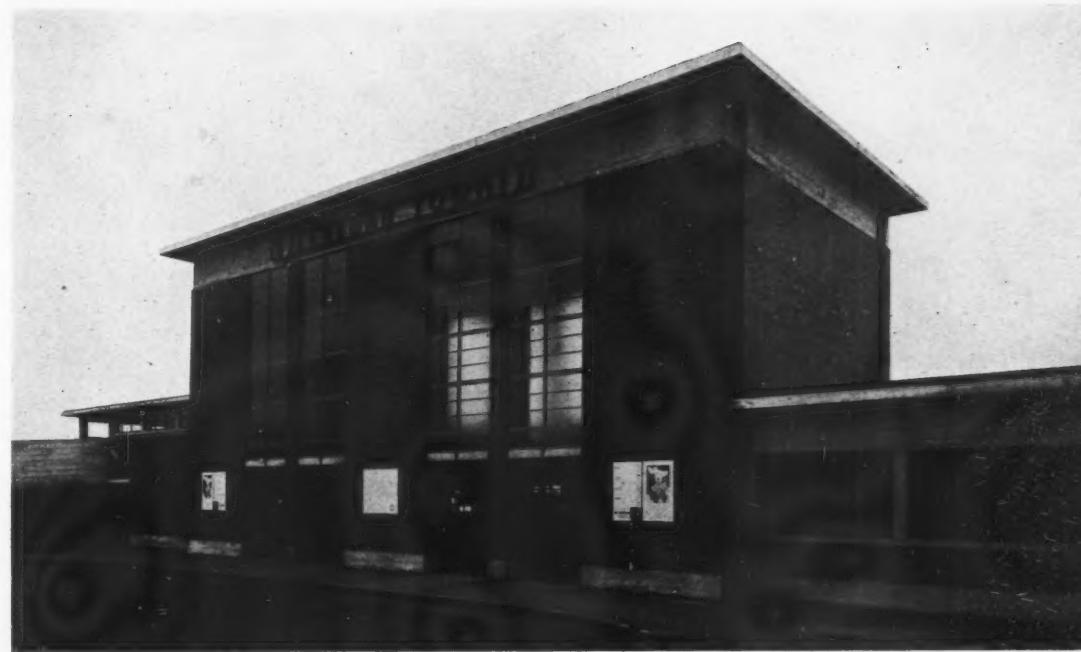


19, 20

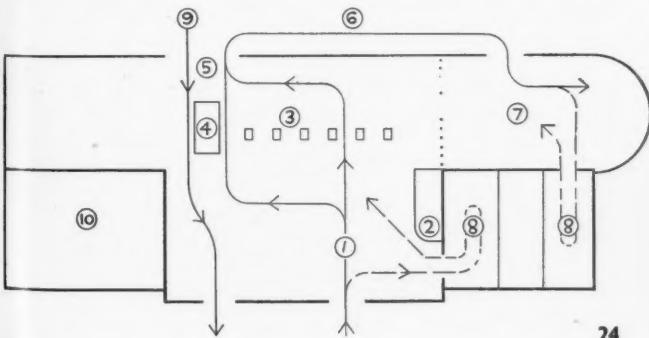
THE BIRTH OF THE CLASSIC STYLE. 1930 is the year in which the classic style of London's transport architecture was conceived. The Piccadilly Line was to be extended to Cockfosters, and rebuilding of stations was needed along the Hounslow and Harrow branches too. Surroundings here were more countrified. An easier, more delicate, it was said, more homely style was called for. Charles Holden and Frank Pick gave the most intense thought to the problem. They went to Sweden, Denmark, Holland and Northern Germany for inspiration. They found brick buildings there which they liked. But they did not lose themselves in admiration of what they knew they could do just as well or better. Sudbury Town, 23, was begun towards the end of 1930 replacing one of the many disgraceful old stations, 25, by a complete sample of the style which it had been decided to adopt for all the new stations. One could not have done better. Except for the somewhat "1925" lighting standards inside, 26, there is nothing tentative or questionable about the little building. It stands firm and yet graceful, demonstrating by its honest exterior that it is not intended to be more than a seemly casing in of certain traffic functions. The diagram, 24, kindly drawn by Mr. Holden's office for this article, shows what these functions were. 1 indicates the main inward traffic; 9 the main outward traffic; 2 is the bookstall (note the rounded corner because of the outward traffic from 8, the refreshment room); 3 are the ticket machines, 4 the booking booth, 5 the place where the ticket collector stands, 6 the up-platform, 7 the waiting-room, 10 staff quarters.



21, 22



23



24



25, 26

ALONG THE HARROW LINE. Sudbury Town was immediately followed by a few others such as Alperton and Sudbury Hill, while at the same time new buildings began to appear on the Cockfosters Extension. 1932-1934 are the classic years. Sudbury Town had had two entrances side by side, each with two openings separated by a slender brick pillar. Sudbury Hill, 27, looks sturdier with its one centre window on each side and the wide expanses of unbroken wall. Alperton, 28, has the two entrances again, but as the pillars are missing, quite a different rhythm results. There are, moreover, the low shopping wings to enrich the picture at Alperton, whereas Sudbury Town has a concrete ramp on the left for prams to pass across the line (63). The interior of South Harrow, 29, is a first essay in the happy harmony that could be achieved by means of classifying all needs and expressing them as conscientiously as possible. From top to bottom, from the skylights to the floor tiles there is nothing that jars—the best object lesson in design that England has to offer.



27, 28



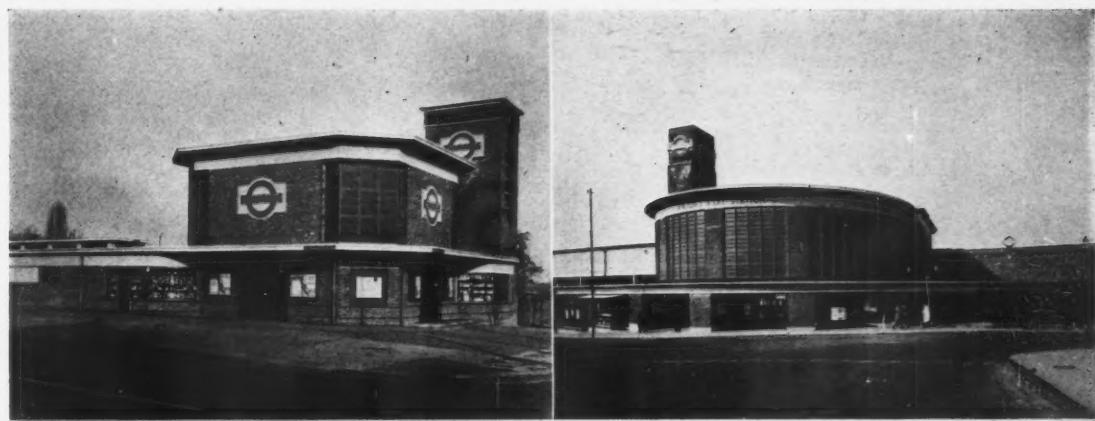
29

ARNOS GROVE, 30 and 31, is perhaps more impeccably satisfactory than any other. There was ample space, traffic approaches were from two sides, meeting at a right angle. The cylindrical shape was thus appropriate. The low square parts spreading out beneath the cylinder link up with the main directions of track and streets. Everywhere simplicity of outline is combined with a remarkable delicacy of detail. To relieve the band of concrete beneath the ground floor cornice, for instance, bands of blue tiles are inserted, a feature already to be found in the Morden extension of seven years before. They add colour and form a convincing background for the station names. The lighting standard, and the standard combination of the L.P.T.B. trade-mark with the flag-staff should also be noted. The curved walls of the interior are of the same beauty and clarity of proportion. Here, if anywhere in contemporary English architecture, the restrained forms of Bloomsbury come to mind. Nor does simplicity deteriorate into dullness. One's interest is kept busy by the interplay of verticals and horizontals: first floor against ground floor, and windows with their sub-divisions against brick walls with their attached concrete shafts. If a criticism of the interior of Arnos Grove is permitted, it will concern itself with the ticket booth developed not very convincingly round the central pillar.

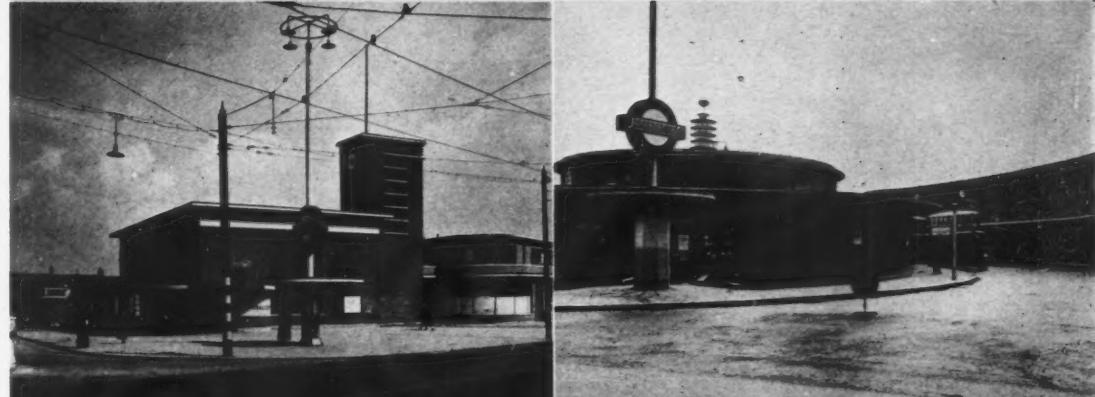


31

THE CLASSIC STYLE SPREADS. Now they followed each other rapidly, these new stations, all preaching the blessings of the same style, and all—the first rule of sound advertising—obviously representing the same enterprise. Seeing them all together, or at least a number of them, as we can on this page, it is eminently instructive to follow the interaction of sameness and difference in appearance, and to link up functional and aesthetic considerations. At Bounds Green, 32, for instance, the engineers asked for a ventilation tower, and the site for the station was small, close to two streets. So a shallow building with chamfered corners resulted. At Southgate, on the other hand, 35, there was ample space and buses were to circulate round the station. So the surrounding sites were bought up, and shops were built to form an orderly background for the low circular station building. Shops were also incorporated into the composition of Turnpike Lane, 34. Here, furthermore, the booking hall is below ground by a number of steps to indicate the fact that at Turnpike Lane Station the tube line just emerges to the surface. A ventilation tower is successfully inserted between station and shops. At Chiswick Park, 33, the earliest building on this page (1932), the tower seems a little inarticulate, somehow reminiscent of the Morden Extension. The semicircular booking hall expresses the confluence of three street approaches. The problem at Northfields, 36, lay in the position of the track and an old station unusually far away from the main street with which the new station had to be connected. So Mr. Holden designed a wide forecourt and a booking hall, long and somewhat narrow with the long axis connecting forecourt and track, a combination of booking hall, in fact, and passage. Enfield West, 37, designed in association with James, Bywaters and Pearce, has the main road meeting the track at an odd angle. The forecourt conceals this. The booking hall incidentally is here immediately above the track. Similarly it had been placed right across the track at Acton Town, 39, where two entrances at right angles correspond to the two main streets. Rayner's Lane, 38, came a little later, in 1936. It was carried out in association with R. H. Uren.



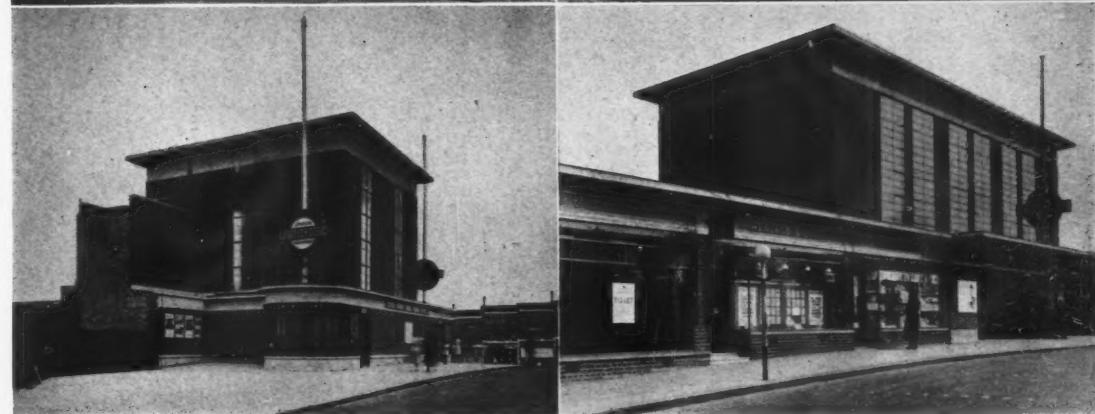
32, 33



34, 35



36, 37



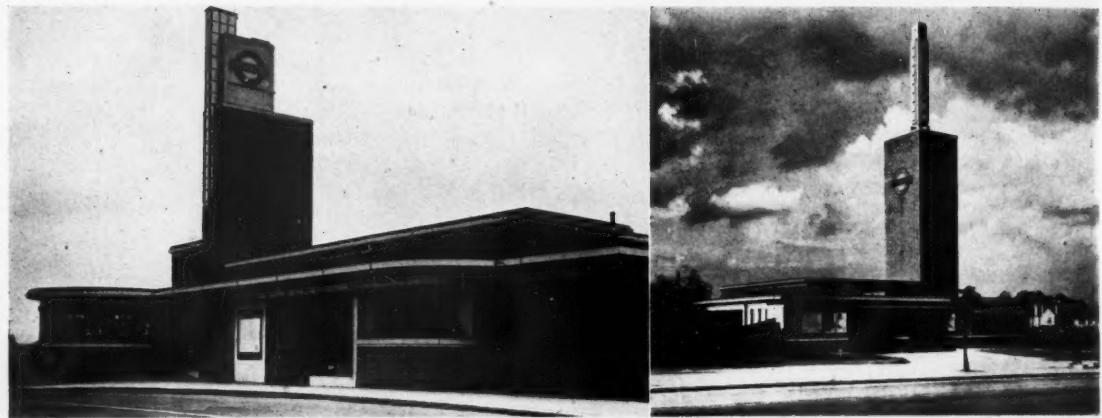
38, 39



40, 41
42

SAMENESS AND HOW TO AVOID IT. The aesthetic danger in the L.P.T.B. style is, of course, dullness. Mr. Holden and Frank Pick were convinced that novelty is no merit, and that a good thing remains a good thing, however often you do it. Hence the uniformity of style permeating all their work. But no architect of such educational leanings as Mr. Holden can always be equally inspired. The buildings erected by the L.P.T.B. at Leicester Square and Warren Street stations, 40 and 41, bear witness to this. Nor could the personal touch of Mr. Holden be easily replaced by the detailing of others. The Leicester Square and Warren Street buildings were carried out by

Mr. S. A. Heaps, the L.P.T.B.'s chief architect. St. John's Wood station of 1938-1939, 42, was designed entirely by Mr. Heaps—an attempt at further modification of the Holden scheme, without giving up its prevailing character. At Boston Manor, 43, on the other hand, and Osterley, 44, features are introduced deliberately, it appears, for novelty's sake. In this the architect and his patron could not be successful. The dash of the Mallet-Stevens forms in the Boston Manor tower, and the quaintness of the Osterley tower did not come natural to two such serious and honest men as Mr. Holden and Frank Pick.



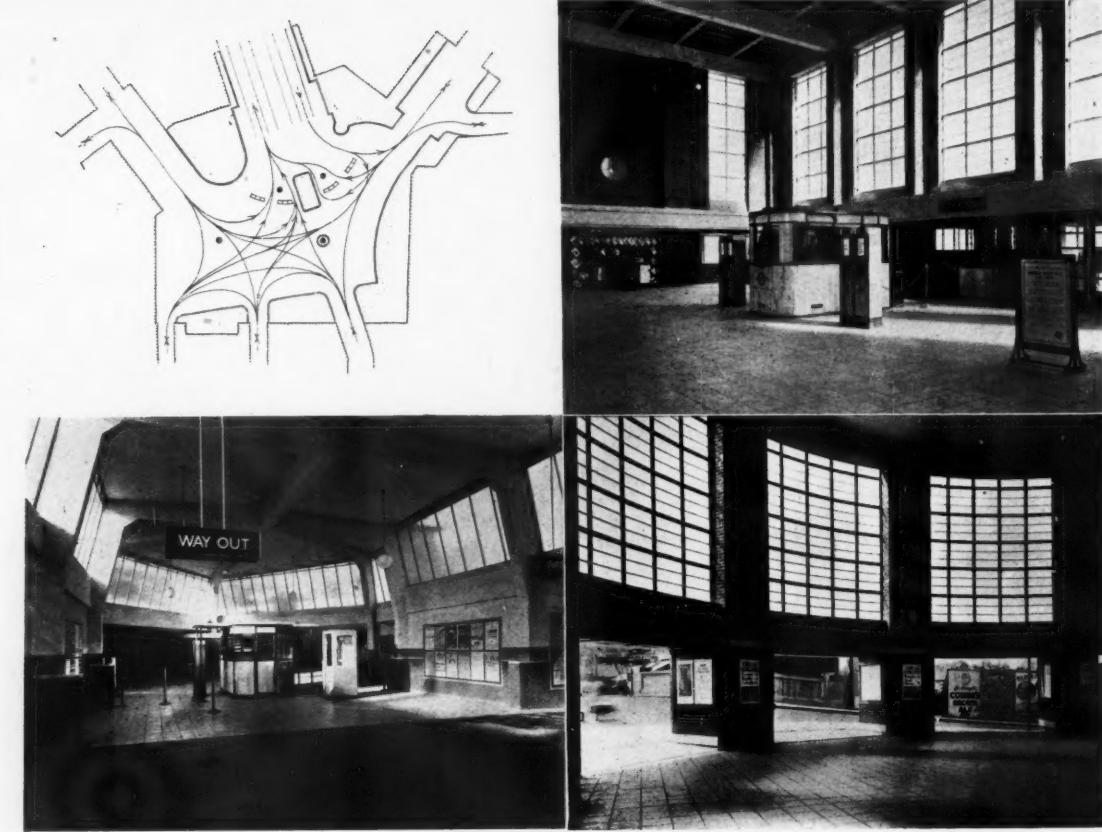
43, 44

REGULATING THE TRAFFIC. One of the most interesting cases of functional planning is the booking hall of the Manor House Station, 45. The diagram, 46, explains the problem and its solution. The barbed lines show the original engineers' structure, the lines enclosing dotted areas the architect's additions to guide traffic. One-way traffic is marked by lines with arrows, two-way traffic by lines with crossed arrows. The ingenious concentration of all inward traffic past the ticket booth and ticket machines towards the escalators is clearly visible. The curious circles of the ceiling with asymmetrically arranged lighting fittings symbolise the asymmetrical shape of the booking hall.



45

STATION INTERIORS. Of other interiors only three can be shown, the rectangle of Enfield West, 47, spacious and airy, with beautifully proportioned walls, windows and pillars, and the brickwork frankly exposed. This Mr. Holden did in all these stations to show their public, non-domestic function. Chiswick Park, 49, has one of the rounded booking halls, and again the proportions of ground-floor pillars to the windows and the posts separating them are singularly happy. Spaces for advertisements are an integral part of the design. Cockfosters, 48, is of quite a different nature, because here concrete is the material and not brick. The resulting forms which will be recognised later in some of Mr. Holden's platforms too, are closely reminiscent of those used by the French. But that is in all probability—just as the similarity between Mr. Holden's brick stations and those of contemporary extensions on the Berlin Underground—due to identity of function entirely, and not to influence. The clerestory arrangement at Cockfosters is as genuine an expression of concrete as the windows of Enfield or Chiswick Park are an expression of brick.



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48, 49

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3 Minor architectural work

Frank Pick would not have been the impassioned educationalist that he was, whether he knew it or not (and he must have known it at least towards the end of his life, when he took to writing on citizenship and a future of visual beauty and orderliness for Britain), if he had not extended his care from station buildings to all the other major and minor architectural work that came up year after year. Whether it was a new underground booking hall, or a lighting fitting, platforms above and below ground, or escalators (with all their technical requirements and spatial possibilities a particularly tempting, but also particularly thorny problem) or whether it was only the surface of a wall or a door, he acquainted himself with function, available materials, current ideas and arrived, guided by his architect, at a solution always sound and nearly always of pleasant aesthetic quality. The amount of work carried out in this way, noticed well enough by the passengers frequenting the particular stations in question, but never adequately appreciated in its entirety, is prodigious.



50



51

ARCHITECTURE BELOW GROUND
The underground booking hall at the Bank, 49, had been something thrilling in 1910, when it was opened. Its spaciousness impressed people a great deal. Yet looking back to it now, from the Leicester Square, 51, and the Piccadilly Circus booking halls, it seems untidy and congested. The secret of the orderliness of the Leicester Square hall, one that Frank Pick insisted on applying to buildings as well as to rolling stock, is to make every item of equipment appear a part of the architectural whole. The lighting fittings at Leicester Square, the show-cases, the notice boards merge into the lines of the concentric circles which govern the composition.



52, 53

46, 47
48, 49
41

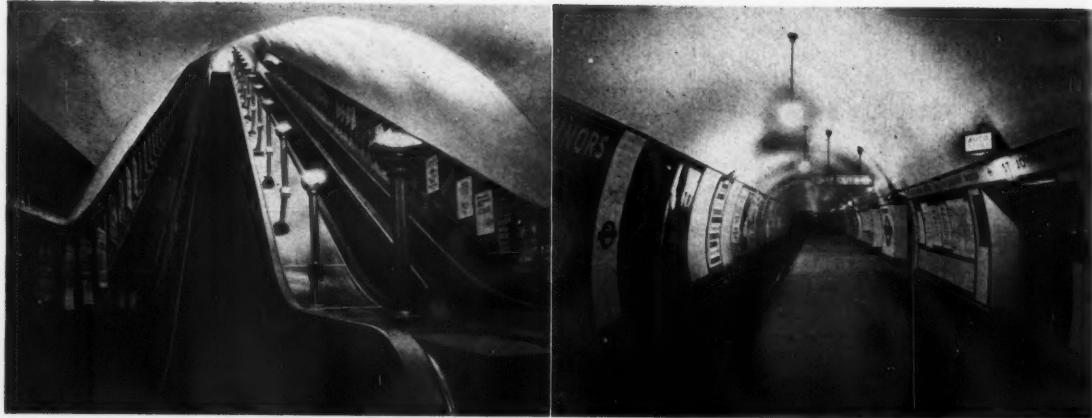
The same principle is successfully applied to the long underground arcade of Knightsbridge Station, 52. The recessed lighting fittings should be specially noted. Shiny surfaces of permanent materials, preferably tiles, are an important feature of underground interiors. They contribute decisively to that general feeling of brightness and cheer that Frank Pick wanted to create, but a well-mannered cheer, with nothing of the artificial and ostentatious that we connect with cinema decoration. What he wanted to prove by such architecture as 52 and every such detail as the door 53, was that simplicity and perfect functional soundness need not drive out brightness but can, if judiciously handled, enhance it.

PRAED STREET BEFORE AND AFTER. Again the contrast between an underground gangway as Pick found it, 54, and as Mr. Holden and Mr. Heaps remodelled it for him, 55, is worth going into. No structural alterations were introduced. It was all a matter of facing the oblong box which the engineers had built. In the picture of 1934 the lamps are an inorganic addition, the wiring lines exposed, the doors have heavily moulded frames and the ticket counter an over-conspicuous Book Here notice on a scrollly bracket. In the photograph of 1936 a coherent composition embraces everything from the individual letter of the word Buffet to the general proportion of a wall or a pillar.



54, 55

DOWN TO THE PLATFORMS. The escalator, 56 and 58-61, is of course, chiefly a technical problem. The Underground began to fit them in in 1911. Various systems were gradually tried out, various gradients, various treatments of the individual steps and hand-rails. But these were matters of engineering. The architect was faced with the thorny problem of having to apply his art to structures outside his control. This may have somewhat hampered his imagination. There seems at least not quite that ease in the design of escalator shafts and escalator detail, that one finds in other L.P.T.B. work. Somehow, one feels, it might have been possible to express more cogently the spatial possibilities of these shafts. Good photographs can convey a clear idea of these possibilities. The fluted lamps along the escalators are not amongst the happier inspirations of the designer.



56, 57



58, 59
60, 61

PLATFORMS BELOW AND ABOVE. The architectural problem of the underground platform, 57, is one of combining tubular shape with spaciousness, and plenty of advertising space with clear visibility in what concerns the passenger. In the most recently built or re-built stations these requirements have been closely studied. But of the platforms as satisfactory as that at St. John's Wood (by S. A. Heaps), 57, there are still few. Lighting fittings, for instance, are better at St. John's Wood than on most other platforms. Seats and automatic sales machines are recessed so as to preserve a complete flushness of the curved walls, and the name of the station can be seen at once, out of whatever carriage window you look. Above ground a large variety of possibilities were offered to the architect. There was first of all—just as in station buildings—the difference between a style appropriate for brick and a style appropriate for concrete; and there were, furthermore, combinations of the two. The platform of Chiswick Park Station, 62, is a typical piece of concrete architecture with the bold cantilevering that only concrete can achieve. It was designed in 1932.



62

K
CONCRETE AND BRICK FOR PLATFORMS. The covered platform at Cockfosters, 64, is again of a frank concrete character. The introduction of the clerestory was functionally and aesthetically successful. At Sudbury Town, 63, the earliest and one of the most charming of all Mr. Holden's stations, the footbridge stands as a band boldly stretched across, against the brick rectangle of the booking hall. The excellent relation between height of parapet and height of roof-supporting pillars connects it for the eye with the proportions of wall and cornice in the station building. At Sudbury Hill, 66, this rhythm of brick wall and concrete cornice, a leitmotif of L.P.T.B. architecture, is carried from the booking hall in steps right down to the platform. At Dollis Hill, 65, more recently, staircase shafts, waiting-rooms, seats, etc., are arranged in one group under one roof. At another station, the most recent of all, 67, the platforms are similar, but the two booking halls are far more ambitious. The bridge across the track, somewhat heavy in appearance, houses the yard master's and foreman's offices, locker rooms, mess room, etc. The semicircular staircase towers, again none too gracefully, connect bridge and platforms. 69 is one example amongst very many to show how minor alterations can help to beautify a station and to impart to it the characteristic L.P.T.B. atmosphere. It is, of course, essential to any big combine's advertising policy that all its publicity should somehow be recognisable at once as this particular Combine's. You can achieve it by a conspicuous trade-mark, by some device of packaging or lettering, by colour (railway carriages), etc. The L.P.T.B. achieves it by a strict orderliness which, owing to the slowness or stickiness of other transport organisations, Frank Pick was able to make the exclusive hall-mark of his companies.

54,55
56,57
58,59
60,61

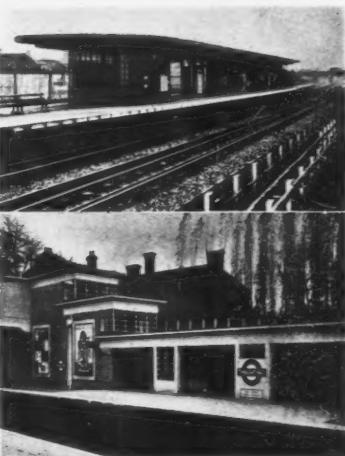
BUS AND COACH ARCHITECTURE. Once the new style had been found in 1930 and applied to the Underground buildings in 1932-1934, architectural jobs for the buses and the Green Line coaches were carried out in the same spirit. The Green Line coaches had been incorporated only in 1930. So a great deal of building was needed everywhere, garages, booking halls, waiting-rooms etc. 68 at Crawley is comparatively small so that the front is hardly more than a frame to the wide doors. Johnston's lettering looks exceedingly well in this context. 70 at Upton Park and 71 at Harrow Weald are for buses, 72 at Hertford is for coaches. The gable over the front of the vast hall at Upton Park is as appropriate as the exposed glass-roofing at Hertford. Harrow Weald seems especially happy in its proportions with the slender windows in the two middle posts.



63



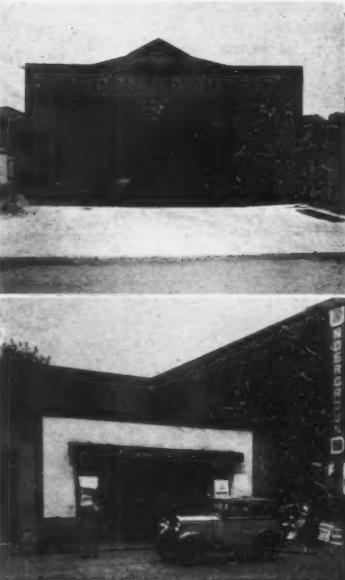
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65



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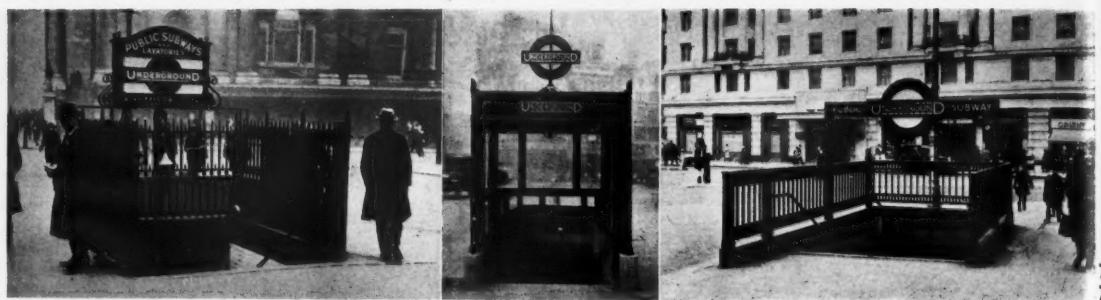


70,71



72

PUBLIC SUBWAYS. When booking halls are below ground, stairs have to lead down to them from the street. Wherever possible they are placed into buildings. Where they start in a street or a square, screening or railing is necessary, and a notice. 73 is an instance of pre-Pick design. 74 at Trafalgar Square of 1928, illustrates an attempt at orderliness by means of neo-classical forms. The acroteria should be noted. 75 is the present pattern, not ideal, perhaps, in the details of the railings, but clear and good otherwise.

73, 74
75

BUS SHELTERS are one of the most gratifying additions made by the L.P.T.B. to the pattern of London's suburbs. They were originally designed in 1933. Surely these clean and friendly looking structures, 76 and 77, must have done a great deal to convince the man-in-the-street of the acceptability of a style that, if introduced with a Tecton impetus might have roused his opposition. Object lessons are the best lessons. Those who have experienced the functional advantages of these shelters, the advantages of so much glass and so little in the way of roof support, will be prepared to welcome something of the same kind at home.

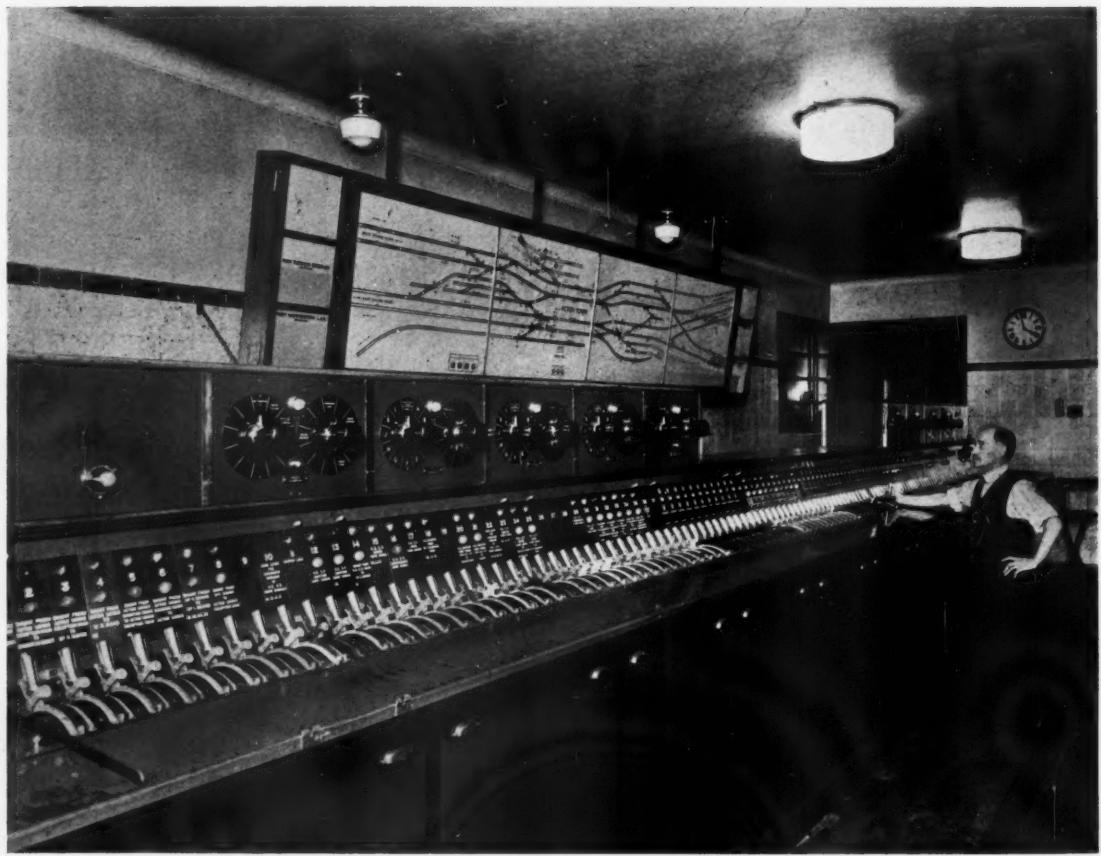


76

77

78

EDUCATING THE STAFF. Well-designed station buildings, one might argue, sell transport commodities. So do well-designed posters. It has, however, been shown in a previous page that not all Frank Pick's posters can be explained as part of even the most broad-minded selling-policy. At a certain stage—this could be proved—Pick, the business-man, became Pick, the educationalist. Now here we see him busy, not to educate the customer, but to educate his own staff. He was a man with a very live sense of social responsibility, and he felt it to be his duty to let the employees of the Board work in an atmosphere as satisfactory as that which he created for his customers. He must have also thought in approving of this locker room, 78, this sub-station, 79, and this signal box, 80, of the effect which such orderly surroundings must have on the minds of those who work in them, and ultimately on their attitude towards citizenship.



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4 Equipment

It is hardly possible to separate architecture and equipment in the Underground stations. The same architect was largely responsible for both, and the same patron guarded and inspired the design of both. It must have helped Frank Pick and Charles Holden immensely in evolving the shapes of all these counters, sales machines, ticket machines, lighting standards, seats, etc., that they were entirely at one in their unusual attitude to the practical and the human. They wanted to serve passengers well, and beauty was the outcome of this modest attitude, as it often though by no means necessarily is.

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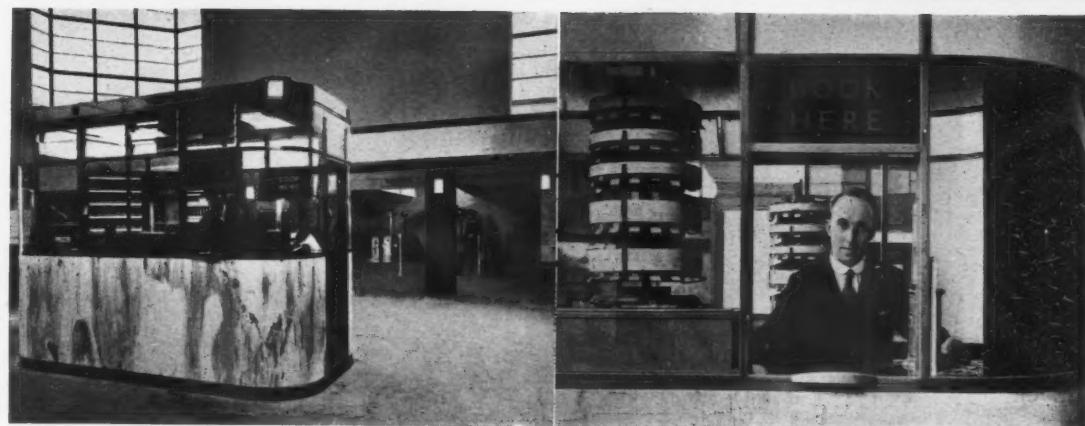
TICKET MACHINES AND SALES MACHINES. Space does not allow us to illustrate all the varieties of ticket machines exhibited on L.P.T.B. premises, from the pathetic little Victorian monument, 82, to the flush sycamore wall with dark inlay lines at Highgate, 81. Most intermediate stages have the same logical appeal as the wall at Highgate, but are less elegant. They should in fact not appear isolated as they do in our photographs 83 and 84. They were designed for repetition and a design that may strike one (for instance 84) as a little lacking in sensibility, does not evoke this criticism when the top parts of several machines read together as one. Sales machines on platforms, 85, are in the more recent stations recessed (see 57).



81

82, 83
84, 85

THE TICKET BOOTH is a standardised feature dating back to the decisive years of the Piccadilly Line extension. But while the new buildings along that line are better than transport architecture anywhere in Europe, the booking offices are not quite up to that exacting standard. They do not wholly merge into the brick, concrete and tile unity of the station interiors and nearly everywhere look added objects, as though they were an afterthought. The marble slabs are a curious feature, too. Why, just in this place, a material conveying to the man-in-the-street associations of something very special and precious?



86, 87

STATION SEATS. Here, once more, patient progress marks the development. The three seats illustrated, 88-90, are only a small selection of all that has been tried out and kept or discarded, from the straightforward, comfortably shaped seat 88, to the attempt at a combination of back-to-back heavy garden seat, with station name-plate, 89, and the attempt at Aalto shapes in a terrazzo-looking concrete material used in recent years by the L.P.T.B. frequently and for various purposes, 90.

BUS STOP SIGNS are another instance of Pick's desire to let no design become stale. He combined faith in the necessity of a stable general style with faith in the necessity for minor changes in detail. Standard is not uniformity. The one means a better life, the other lifelessness. Moreover Pick was not a purist as regards the question of ornament. He liked it, where it seemed appropriate. It is in the bus stop signs of the twenties and the thirties that all sorts of minor decorative detail appear, less, of course, in the concrete post, 93, than in the metal ones.

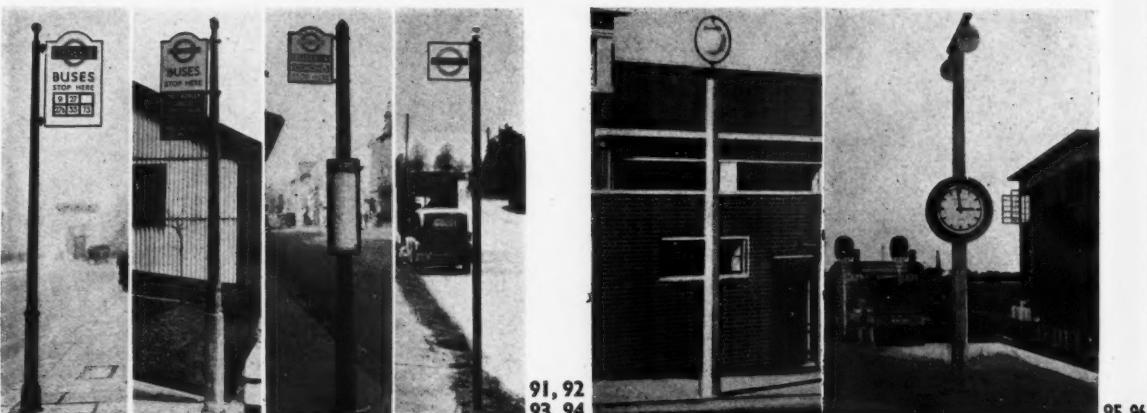
LIGHTING STANDARDS. Two standard patterns introduced for the Piccadilly extension, 95 and 96, sound and satisfactory, and not lacking in grace.

FUNCTIONAL AND DECORATIVE. Where function dominates as in the platform clock, 97, or the litter basket, 98, no adornment is admitted. Yet the litter basket against its travertine wall is of a perfection rarely achieved by our age when it tries to be ornamental. On some platforms Pick introduced purely decorative features. Though less distinguished they have the orderliness that permeates all L.P.T.B. work. 99 is an enamel plaque at Enfield West, 100 a tile at St. John's Wood (by Harold Stabler).

UPHOLSTERY MOQUETTES. About 1936-37 Frank Pick began to interest himself in the covering materials of tube, bus and trolley seats. Some of the best English textile designers were asked to make sketches. The two illustrated, 101 and 102, are by Marion Dorn.

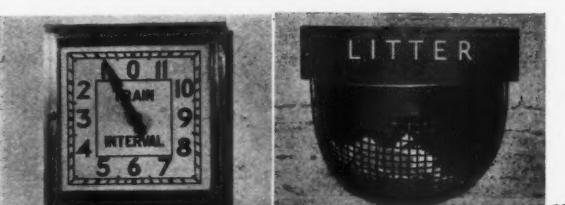


88, 89
90



91, 92
93, 94

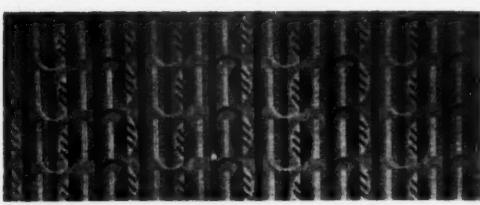
95, 96



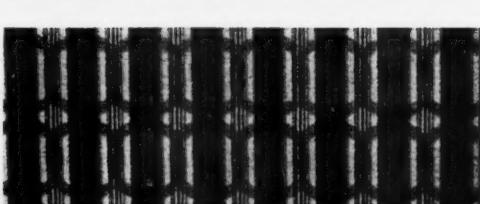
97, 98



99, 100



101

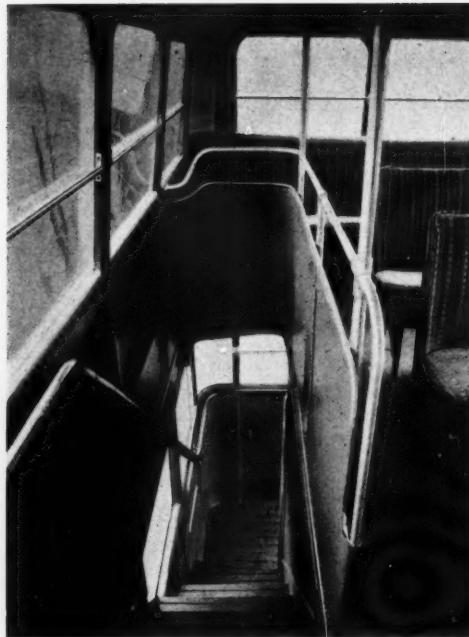


102

5 Rolling Stock

If patient progress is the name chosen for this album of L.P.T.B. design, the appropriateness of this title comes out more convincingly than anywhere else in the evolution of rolling stock. One may doubt whether the changes in platform seats or the tops of bus stop signs can always be accepted as progress, but in shapes and interior equipment of tubes and surface carriages, buses, trams and trolleys, each step taken was a step forward. These steps are worth following in some detail.

TUBE CARRIAGES. Metropolitan, District and tube carriages were originally of timber. Metal panels were used on wooden strutting early in this century, but their sizes were still those of wood panels. The first steel-framed carriages ran on the District in 1911. The early tube carriages of 1906, seqq., had pantograph doors at both ends, 105. They were closed in later on. The design was still that of railway carriages. To the 1920 stock, 106, a new

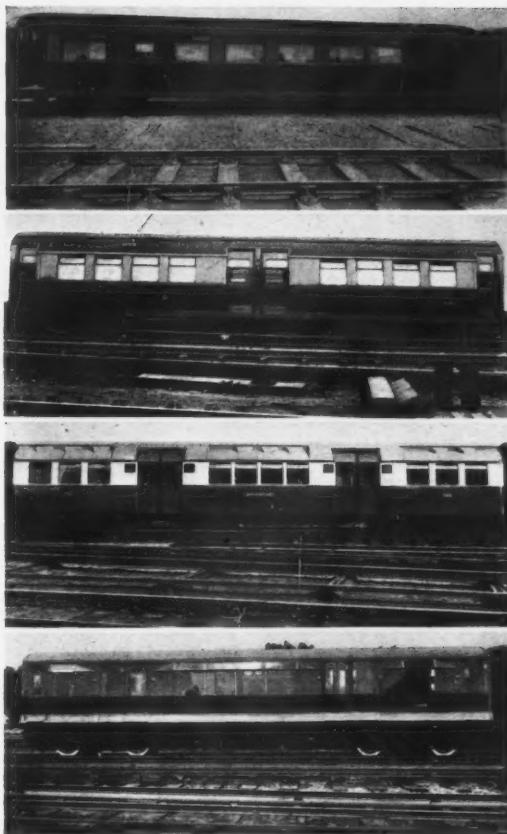


103, 104

section was given, a bulging out of the sides to obtain more foot space. One could thus do away with footboards sticking out, an ugly and dangerous feature. The seemingly streamlined section of the most recent underground carriages, 108, the ones introduced on the District line in 1937, is caused by the same considerations. The sole function of the curve is to cover the footboard so that it can be used at stations, when the doors are open, but not as soon as doors close and the train starts. Automatic doors, incidentally, came in in 1906, but were given up again and re-introduced in 1919. Development ever since has been towards wider door space—it is now twenty-five per cent. of the side wall—wider window space with thinner pillars separating the windows, and smoother surfaces, obtained by means of larger panels and flush welded joints. 107 is a tube carriage of 1929 stock. Here, or more correctly in smaller batches of carriages of 1926-27, flushness was achieved, though there is still a beading separating the cream from the red portion which has been done away with in 1937 District and 1938 tube stock. The carriage, 111, of 1937 has only three panels for the whole front. Destination indicator and signal-lights are built in. Another innovation are the glass hoods of the window ventilation. There is a horizontal metal valve between them and the window which is operated by hand. But the main ventilation is neither at the windows nor along the sides of the clerestory as in 107, but through the roofs, working from front to back of the carriage.

101
102
103, 104
105
106
107
108
109
110
111
112, 113
114

TUBE INTERIORS. Exactly the same tendencies dictated the development of interiors. In 103, of 1907, every part of the equipment seems separately stuck on. The cleaning up in the 1920 stock was a tremendous advance, 109. Yet, compared with 1937, 110, it appears still finicky. Note the ceiling lights and the rails for strap handles. In the 1937 stock both these features have become part of the architectural composition. Our illustration does not allow to judge of the great improvements in such minor details as the piers between the windows. By means of a great deal of technical ingenuity they too have been made flush. Visible screws have been all but abolished. The alternation of longwise and crosswise seating is introduced in order to obtain the widest standing accommodation by the doors and taper it down away from the doors.



109

110



110

BUSES FROM 1910 TO 1923. The B type of 1910, 112, now looks a museum piece, woody, with weak-boned wheels, sticking out footboard, open upper deck and untidy lettering. It accommodated thirty-four passengers. S. of 1920, 113, was a much bigger affair. Fifty-four passengers could be carried. Aesthetically, however, it is scarcely better than the old B. With the NS of 1923, 114, the covered upper deck came in, thanks to an ingenious lowering of the centre of gravity of the car.

112, 113
114

BUSES FROM 1927 TO 1939. LS, 115, and the very similar LT were the first six-wheel and six-cylinder buses. They were all built with open staircases. Covered staircases came in at the beginning of 1931, and the LS here illustrated has had one fitted in. It helps to make it appear considerably more up-to-date than its original features really are. The driver's seat was not yet boxed in, and the canopy above is as clumsy as before. The ST of 1930, 116, was the first and only all-metal bus. The innovation proved unsatisfactory, and to-day bus bodies have a framework of timber with inserted metal flitches and covering metal panels. Except for the front canopy and the route number, there are no alterations of great aesthetic import. These did, however, come, in 1930—the year of Sudbury Town—with the first experimental trolley, 117. Pick had seen tram cars in Denmark, cleaner and squarer than any in London, and he conveyed his impressions so forcibly to the designers concerned that the outcome was this beautifully proportioned vehicle. The STL buses of 1933, 118, translated this new flushness into bus design. They were originally sixty seaters, but then the seats on top were thinned out for seating comfort's sake to fifty-six. As against ST the top-deck forms the roof of the driver's cabin—a considerable improvement in appearance—the sides are flusher, the windows straighter, the top-deck window on the right is curved backward, and overall width is increased by 4 ft. to 7 ft. 6 in. The trolley of 1935, 119, went further still in compactness of outline, as far indeed as could be done without making the front undistinguishable from the back. RT is the most recent bus type, 120. It dates from 1939, and has less window pillars, that is more actual window space, than any of its predecessors. The route number is placed in a better position along the side. Such details as the point where driver's cabin, front of lower deck and radiator meet are also beautifully clean.

BUS INTERIORS can be shown only in three stages, NS, 121, with wooden seats and the strutting of the roof showing, LTS, 122, almost as smooth as they are now, but still with the lighting breaking through the ceiling curve and the seats of timber with rubber cushioning and metal rails attached to the backs, and RT, 123, with the patented tubular seating (introduced in 1934), one of the new and improved moquettes to cover the cushions, and the half-drop windows operated by handles instead of springs.

A TROLLEY WIRE LUBRICATING CAR, 124. As in architecture, so in rolling stock, Frank Pick—visual educationalist and evangelist of citizenship that he was—insisted on the best in design, even where it was not to serve the paying public but the L.P.T.B. employees.





Beech Holme



Castle Towers Hotel



Gayton

121 Treasure Hunt

By Peter F. R. Donner

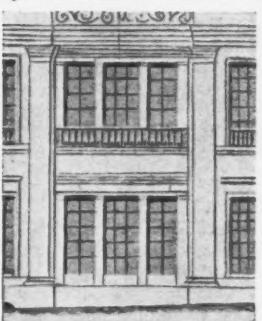
The object of these articles is to create and sustain an interest in the architecture of the nineteenth century, as it surrounds us all, where we live and where we work. Neither famous public buildings nor the churches of the distinguished revivalists will be analysed. Each month a group of houses will be chosen that do not exhibit any features to which attention would usually be paid. Yet houses such as the ones along Parkside, Wimbledon Common, have a good deal that is characteristic of the "Coburg style," and a good deal that may be instructive and entertaining.

SPECIMEN

No. 1



A typical porch or loggia of the classic revival, with Neo-Greek pillars and a severe entablature. The simple and delicate railings of the first-floor balcony are of the same spirit.



Sir Robert Smirke: University Club and College of Physicians, 1824-27.

tion of the house too, with its pedimented centre and its two lower projecting wings, seems at first to corroborate a pre-Victorian date.

Beech Holme

Symmetry is one of the fundamental principles of neo-classical architecture. The integrity of each part and its separation from all the others is a second principle. A third is limitation to basic geometrical shapes. The Greeks kept to horizontals, verticals and the diagonals of pediments. So did the strict Greek revivalists. If it were not for the bulging balusters of the ground-floor, the entrance loggia of "Beech Holme" might be designed by Sir Robert Smirke or Decimus

Burton. Pillars and entablature are severe enough, and the railings of the first floor terrace have all the sparing delicacy of true domestic Greek. The

round-headed windows of the wings rest on thick Italianate columns.



Villa from Loudon's Encyclopaedia of 1833 and villa in John Nash's Park Village East, begun in 1824.

term is allowed, belongs to Loudon, our never failing source for the thirties and forties. The first edition of his *Encyclopaedia* appeared in 1833, the second in 1846. Here the chalet-pediment occurs, together with our neo-classical loggia. As so much of what is undogmatic and rather loose in Loudon goes back to John Nash, the real originator of the Coburg style, so the chalet-pediment, appears already in Nash's Park Village, which was begun in 1824, accompanied incidentally by arched windows, quite similar to those in the wings of "Beech Holme." They rest here on rather clumsy Renaissance columns—another crime against the rules of the Greek Revival. Such columns appeared in the Adelaide and Belsize district (February Treasure Hunt) only after 1850. But since Loudon favours the motif too, we need not go beyond 1840 with "Beech Holme."

SPECIMEN

No. 2

Beech Holme

However, the details of pediment and wings tell decidedly against such an assumption. A truly neo-classical architect would have regarded it as a sacrilege to design a pediment without any horizontal basis. It causes an utterly unclassical merging of wall into pediment, a lack of articulation impardonable to the strict Grecian-minded. It imparts to "Beech Holme" a *chalet* feeling, not at all unpleasant, and quite appropriate for a suburban villa. This chalet-pediment, if the

SPECIMEN

No. 3

Castle Towers Hotel

As to the Castle Towers Hotel, only a few houses away from "Beech Holme," this is Loudonian in the extreme. Loudon fills pages of his *Encyclopaedia*, praising the "scattered irregular masses, great contrasts of light and shade, broken and plain surfaces,



In the next house these Italianate elements have become predominant. The tower with the widely projecting roof especially was a favourite feature. The overdose of brackets everywhere should also be noted, and the happy-go-lucky throwing in of Elizabethan motifs in the window parapets.



From Loudon's *Encyclopædia*.
which distinguishes the modern Italian villa from any other." In this enthusiasm, incidentally, he had also been anticipated by Nash, who designed Cronkhill as an asymmetrical Italian

villa as early as 1802. The effect of Loudon's teachings is evident in the tower of the Castle Towers Hotel with its far projecting Italian roof, its round-headed windows and even its wind-vane. The free grouping should

also be noted, the typically mid-nineteenth century accumulation of unnecessary brackets, and the Elizabethan window parapets. Readers of THE ARCHITECTURAL REVIEW will have observed in Mr. Ross Williamson's article on Leamington a few months ago, how, during the first third of Queen Victoria's reign, the Elizabethan and the Italian fashion went on happily side by side, coaxed into a none-too-rigid unity by the art of the gardener.

SPECIMEN No. 4

Castle Towers Hotel

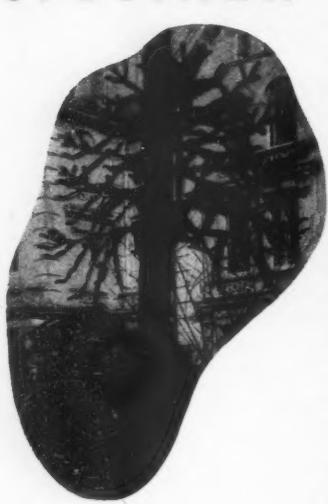
As for the suburban and country garden in the Victorian age, there is one tree worth a very special treasure hunt, the araucaria, or monkey-puzzle. It is so pre-eminently characteristic of a certain phase that a little special research seemed permissible. Here are its results, offered without much comment. The Araucaria imbricata was introduced into Britain from Chile in 1796. The first trees were planted in Kew and in Sir Joseph Banks's private garden at Spring Grove. Thus Loudon tells us in his classic *Arboretum* of 1838. He adds :

"We have no doubt that, as soon as plants can be procured at a reasonable rate, it will be as generally planted as the cedar of Lebanon."

So in 1838 the monkey-puzzle (this is the translation of its native name) was known but not yet popular. Fourteen years later, in 1852, Standish and Noble write in their *Practical Hints on Planting Ornamental Trees* : "This very noble tree is now well known, and its attractions appreciated by all. . . . Its deep green colour and highly ornamental and unique appearance, combine to render it the most attractive of hardy trees."

Hugh Fraser (*Handy Book of Ornamental Conifers*) joins in in 1875 : "Few ornamental trees are more extensively grown or more universally popular; and among the many magnificent forms of the Coniferae which now so richly adorn the parks and pleasure grounds of our country, it is undoubtedly one of the finest; unique in its massive grandeur and symmetry of form, and producing, wherever introduced, effects which never fail to call forth the warmest expressions of admiration. . . ."

The slump of the araucaria came with the end of the century. The view of the



The monkey-puzzle, or araucaria, the pet of the Victorian gardener. The tree was first imported into England from Chile in 1796. In 1838 it is discussed by Loudon, but not by any means as an accepted ornamental tree. A book of 1852 says that "its attractions are appreciated by all," and a book of 1875 that "few ornamental trees are more extensively grown and more universally popular."

great variety of outline against the sky" and the general "pictur-esque ness

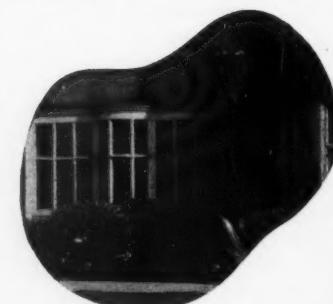


From Loudon's *Encyclopædia*.

educated to-day—or rather yesterday—is expressed by Violet Markham in her recent book on Paxton as follows : "I cannot draw a veil on one enormity committed by the Duke (of Devonshire) and his gardener (Paxton). They must be acquitted on the technical point of having introduced the monkey-puzzle into England. But they treasured and admired this corrugated-iron horror, stuck together by Nature in some fit of super-peevishness." That was yesterday. For to-day I have no quotation. But it should be self-evident that an araucaria would fit the exterior of a Corbusier house just as perfectly as a rubber-plant fits a Gropius interior. I have in fact been told on good authority that Mr. Christopher Tunnard, before he went to America, had contemplated an avenue of monkey-puzzles in connection with a large-scale garden scheme.

SPECIMEN No. 5

Gayton



The Italianate villa was replaced by that of Tudor or Jacobean imitation. Unduly simplifying matters, I think I can say that if such Tudor mansions are symmetrical, they are either very early or very late. Loudon's *Beau*

Idéal of a villa is an early example, "Gayton" is one of the twentieth century.

Loudon's *Beau Idéal of a villa*, 1833.



Paul Waterhouse: Bozedown House, Oxon., 1912.



Detmar Blow: Woodcote, Oxon., 1913.

would, I am sure, ever mix up a Tudor mansion of 1840 with one of 1900 or 1910. Archeological correctness had so rapidly grown during these sixty-odd years that no mistake can be made. If more pointers are considered necessary to make sure of the date of "Gayton," one need only look at the nearly unmoulded mullions and transomes—a very important help to dating the Tudor of about 1900—and at the neo-Georgian cornice above the ground-floor windows.

SPECIMEN No. 6

Gayton

Moreover that crispness of the carved detail and its deep undercutting seem—but I may be wrong here—to indicate the twentieth century and the generation of Guy Dawber, Detmar Blow and Sir Robert Lorimer in domestic, and of Temple Moore and Comper in church work. The closest



Such crisp carving and deep undercutting also belongs to an Arts and Crafts or post-Arts and Crafts rather than a Victorian date. It may well be c. 1920-25.



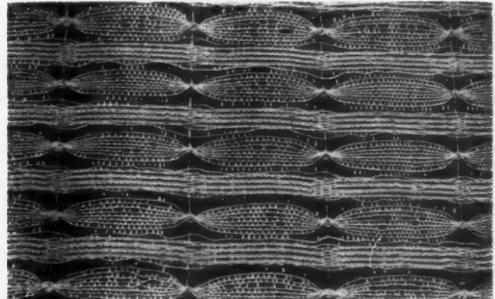
Organ gallery of Sir Giles Gilbert Scott's Liverpool Cathedral.

comparison with the carving of the entrance to "Gayton" which I can here offer, is a detail from the organ gallery in Sir Giles Gilbert Scott's lady chapel of Liverpool Cathedral. But there must be better comparisons which some might be kind enough to point out to me. I should not be surprised if they came from the *entre deux guerres*, and not from Coburg days at all.

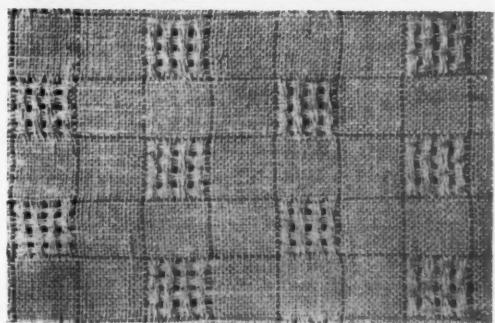
FABRICS FOR EXPORT

THE ARCHITECTURAL REVIEW used to report fairly regularly on new developments in furnishing textiles. When the war started, the subject had to be left in abeyance. The public stopped for a time buying fabrics, and manufacturers had their orders to the shops and stores cancelled. Then the public returned, but supply restrictions made it difficult for the manufacturers to produce new materials, at least for the home market. The percentage of textiles available for the British public is now at something like 10 per cent. of pre-war on an average (rationing figures vary for different fibres). As for the export trade, the Government favours it, but, on the whole, with far too little consideration for design.

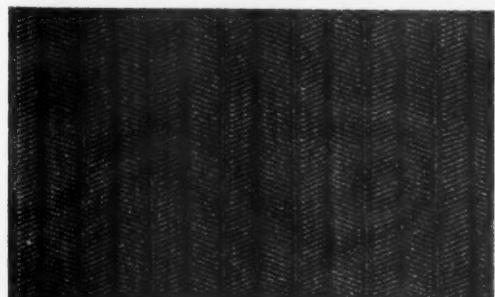
In these circumstances it was not worth a manufacturer's while to put money into new designs for the English public. And since we do not, as a rule, hear much of what is done specially for export, the impression the public must have formed is that all the skill of British textile design lies idle for the time being. This is, however, not quite so. The Arts and Crafts Exhibition at the end of last year contained enough printed fabrics to remind one of the existence of excellent designers for such purposes. There were also some few delightful hand-weaves. And as for power-loom weaving and industrial production, though most manufacturers prefer not to take risks, there are a few doing work just as interesting and promising as they did in 1937, 1938 and 1939. We illustrate three new Helios materials designed this year for the export market.



A transparent curtain material. The weave is really quite simple, but the technique is ingeniously used. Note the cellophane strands in the warp. They give a special glitter.



A linen fabric, chiefly for teacloths. The large checks are separated from each other by gold threads.



A mohair upholstery material on a firm linen basis. Greyish-blue with a red warp stripe, or nigger with yellow, or red with light blue.



The Warburg Photographer at Westminster Abbey

The Warburg Institute is proving more and more a blessing to live archaeology and history in England. Its exhibition of British Art and the Mediterranean, now touring the country, gave a first taste of its intelligent methods and its skill in presenting its findings. The Institute has in the meantime embarked upon a photographic campaign sponsored by the National Buildings Record. Large numbers of excellent photographs—photographs of high aesthetic as well as documentary value—have been taken of the Soane Museum, Kensington Palace, Burlington House, the Athenaeum, the Reform Club, the Courtauld Institute and of monuments in Westminster Abbey. Some of them amount to real discoveries. English sculpture of the eighteenth and early nineteenth centuries comes out in a splendour unexpected even to the expert. We are giving only one example here—Sir Richard Westmacott's monument to Charles James Fox—but, thanks to a recent special arrangement with the Warburg Institute, more will be published in the near future.



BOOKS

Housing, Economics and Scandinavia

HOUSING IN SCANDINAVIA. By John Graham, Jr. University of North Carolina Press. (In England: The Oxford University Press). 15s. 6d.

THE author of this book is a Philadelphia architect. "His interest"—we are told by the publishers—"was early drawn to the deplorable living conditions of the slum dwellers and the need for a broad and comprehensive programme of re-housing. . . . As a pioneer in the field of public housing, Mr. Graham was instrumental in introducing the first modern housing act in the Pennsylvania legislature. . . . Since the completion of the present volume he has joined the technical staff of the United States Housing Authority." Not a mean reference. . . . To us his book presents a two-fold interest: first it gives the point of view of an American "expert" on European (in particular, Scandinavian) housing, and is thus different from any book written on this side of the Atlantic; secondly, as an indication that the muddled thinking on housing questions from which this country has long suffered, is not a privilege of the Old World.

Mr. Graham is certainly, as his publishers claim, "well-meaning and enlightened," and would not agree with the affirmative to the question put to a "guest-speaker, a prominent housing official, . . . by one of a group of public-spirited citizens gathered round a dinner-table. . . ." Here is the question, which opens the Preface to his book, and the answering of which is its main purpose: "The question that bothers me is this: if we give new housing with its sanitary plumbing and heating to the low income groups, won't it be whetting their appetites for more and more? . . . Isn't it establishing a dangerous precedent?" In his answer the above-mentioned "guest-speaker" pointed out that experiments of public housing in European countries did not lead to unreasonableness on the part of the "lower income groups"; on the contrary they seemed appreciative of the kindness extended to them and satisfied with their better living conditions. (Up to recently there were few, if any, attempts at "public housing" in the U.S.A.). This is the same argument, and a very valid one indeed, with which the housing reformers, these last seventy-odd years, have used to

persuade "public spirited citizens" in various countries to go in for public housing. Not only do they thus practise an act of laudable charity, so satisfactory for the conscience of the "public spirited citizens," but they rob "ill-advised agitators" of some of their reasons for discontent, and at the same time secure considerable financial benefits to an appreciable number amongst themselves.

It seems worth while to examine more closely the broad principles of this question of public housing and land policy. Mr. Graham, in his Scandinavian journeys, finds to his great satisfaction that the municipalities and other public bodies practise a very "progressive" and "enlightened" policy of housing and of land acquisition. The reason for this must be found in the general economic set-up of these countries, and not in their enlightened institutions, which are themselves only a reflection of the former. All four countries are, in a sense, industrial as opposed to investor countries (such as Great Britain, France, Holland and the U.S.A.). Now, the life-blood of industry is cheap and contented labour. One of the means of securing this is the provision of tolerable living conditions for the workers. It is therefore not surprising that the "public spirited" industrialist personally (and, even more so, corporatively) views very favourably the provision out of the public purse, of conditions which otherwise he would have to provide himself, either indirectly, by means of higher wages, or directly, by housing his own workers. Thus in those countries where the main emphasis lies on industrial expansion, municipal or other public housing ventures come about more easily than where the conflict between the interest of the secure investment and industrial expansion sways towards the former. For instance, the financial interests which provide the capital for speculative building ventures will view publicly subsidised housing with misgiving. (It is immaterial whether this subsidy consists of actual cash, low rentals, or lower-than-prevailing interest rates.) In the U.S.A., where considerable capital is engaged in financing real estate transactions and building ventures, these interests command enough power to obstruct "public housing," but the U.S.A. is not for this reason either more or less democratic than the Scandinavian countries.

Housing problems become incomprehensible if the general background of society, in which they fulfil a specific function, is misunderstood, and I do not think that the reader of this book will get a clear picture of actual facts. It is not necessary to make a book on housing into a treatise on political economy, but when so much space is devoted to general ideas the least one could expect is a process of clarifying rather than obscuring the issues. The question which arises in housing as well as in other fields of national economy is the use made of our prodigious technical potentialities: how, in the words of Mr. Milo Perkins (Executive Director of the Board of Economic Warfare in the U.S.A.) in May this year, to make a "commodity-rich and consumption-poor" civilisation into one which will be "consumption-rich." The piecemeal measures used in the Scandinavian countries only put off, but did not avert, the "breakdown of our civilisation which has befallen us." We must face the fact that the nations of the so-called civilised world have lived like misers, far below their income, starving their children and housing their families in slums.

Standards of Scandinavian housing were appallingly low, and all the reforms brought about by the measures described in this book have done little to approach even the lowest of British housing standards. To saddle families with the burden of erecting their own houses (as in the Swedish "self-help" housing) shows only an amateurish fiddling with the problem. It may be amusing for a traveller to see the unfortunate victims of these experiments toiling at a task for which they are utterly unsuited, but it can hardly be described as worthy of Sweden, one of the richest industrial countries in the world. The problem of housing is not one of good-will or charity on the part of "public spirited citizens" towards the "lower income groups," but everyone's birth-

right and due in a society overflowing with wealth. Mr. Graham would have served public housing better had he shown to his fellow countrymen and to the world at large the stupendous achievements science has to its credit not only in the field of engineering but also in the technique of building, and shown us the way to applying them to that Cinderella of human pursuits, housing. The trouble is that Mr. Graham is a specialist on housing, and specialists wear blinkers. The architect's speciality is not to be a specialist. He must apply the achievements of one branch of building to another, only thus can he achieve progress and improvement in a particular branch.

Mr. Graham's book consists of five chapters, dealing respectively with Land for Housing, Municipal Housing, Housing Societies, Rural Housing and Colonization, and Applied Philosophy. It is annoyingly written, being spiced with facetious remarks, quotations and irrelevant anecdotes. The illustrations are numerous and only confirm the impression of the general low standard of Scandinavian housing. To do justice to Scandinavia it must be said that hardly any of the remarkable, but isolated, examples of really modern housing or architecture are mentioned in the book.

ERNO GOLDFINGER

A Handbook of Plywood

PLYWOODS—Their Development, Manufacture and Application. By A. D. Wood and T. G. Linn. Edinburgh and London. W. & A. K. Johnston, Ltd. 25s.

PLYWOOD is at least 4,000 years old, yet to-day, owing to resin bonding, it is a new material—a new medium for architects to work in, and Cennini said of the artist's media that, before he can exploit them fully, he must understand them.

Without the knowledge of the physical properties of wood and plywood, veneer jointing and matching, glues and their characteristics, the differences between laminboards and blockboards, no architect can hope to exploit the use of plywood.

It is the thoroughness and clarity with which the authors have shown "how the wheels go round" that makes *Plywoods* so important a book. It tells the whole story of plywood, from its manufacture to its use, and it has, moreover, the great advantage, too often lacking in books of reference, of being readable throughout; it reveals scholarship by concealing it. Part VII, which gives detailed descriptions and particulars of the various types of plywood; Part IX, the development of wall panelling; and Part X, which deals at great length with the use of plywood and devotes nine pages to constructional drawings, are possibly the portions which will be most turned to.

If there be a criticism of the book, it is that it does not sufficiently emphasize the future use of plywood and invite experiment. Admittedly, the illustrations are suggestive and provoke the imagination as to what might be done with the new plywood, but such suggestions are of an indirect nature, showing what other people have done and inviting emulation. But emulation is insufficient. Fresh ideas and new methods are what a new material calls for, and there is an insufficiency of hares started by the authors for enterprising architects to follow.

Perhaps, on the other hand, the authors have consciously refrained from this and have, in effect, said "We supply all the facts. Let those with imagination take these facts and beat up their own hares." If that be so, they have made an excellent job of their intention.

But still it can be argued that revolutionary ideas do not spring readily from known facts, and some guidance is needed.

Will to-morrow's houses be without solid wooden floor bearers? Will floor bearers be produced from moulded H-sections of plywood of far less weight? Perhaps not, but it is certain that modern plywood will bring radical changes in both construction and decoration, and some hints in the book that would have indicated lines of thought would have been useful.

N. C. STONEHAM



Top, municipal flats in Copenhagen, showing a close resemblance to the more old-fashioned type of L.C.C. flats. Bottom, a garden colony in Helsinki, incorporated in the city plan. From "Housing in Scandinavia."

A Night-club in the Forties

As we rattled over the boisterous pavements, past splendid squares, churches and shops, our cabman turning corners like a skater on the ice, and all the roar of London in my ears . . . I thought New York a hamlet, and Liverpool a coal-hole. . . . My head was spinning round like a top, and my eyes ached with much gazing. . . . "Stop," cried Harry, after a long while, putting his head out of the window, all at once—"Stop! . . . You have passed the house—No. 40 I told you—that's it—the high steps, with the purple light."

It was some semi-public place of opulent entertainment, and far surpassed anything of the kind I had ever seen before. The floor was tessellated with snow-white and russet-hued marbles; and echoed to the tread, as if all the Paris catacombs were underneath. I started with misgivings at the hollow, boding sound, which seemed sighing with subterraneous despair, through all the magnificent spectacle around me; mocking it, where most it glared. The walls were painted so as to deceive the eye with interminable colonnades; and groups of columns of the finest scagliola work of variegated marbles—emerald green and gold, St. Pons veined with silver, Sienna with porphyry—supported a resplendent fresco ceiling, arched like a bower and thickly clustering with mimic grapes. Through all the East of this foliage you spied in a crimson dawn, Guido's ever youthful Apollo, driving forth the horses of the sun. From sculptured stalactites of vine-boughs, here and there pendant hung galaxies of gas-lights, whose vivid glare was softened by pale, cream-coloured porcelain spheres, shedding over the place a serene, silver flood; as if every porcelain sphere were a moon.

At numerous Moorish-looking tables, supported by caryatides of turbaned slaves, sat knots of gentlemanly men, with cut decanters and taper-waisted glasses, journals and cigars before them. To and fro ran obsequious waiters, with spotless napkins thrown over their arms, making a profound salaam, and hemming deferentially, whenever they uttered a word.

At the further end of this brilliant apartment was a rich mahogany turret-like structure, partly built into the wall, and communicating with rooms in the rear. Behind was a very handsome, florid old man, with snow-white hair and whiskers, and in a snow-white jacket—he looked like an almond-tree in blossom—who seemed to be standing, a polite sentry over the scene before him; and it was he who mostly ordered about the waiters; and with a silent salute, received the silver of the guests.

Our entrance excited little or no notice; for everybody present seemed exceedingly animated about concerns of their own; and a large group was gathered around one tall, military-looking gentleman, who was reading some India war-news from *The Times*, and commenting on it.

Then . . . Harry led me into a passage, toward a staircase lighted by three marble graces, unitedly holding a broad candelabra, like an elk's antlers, over the landing. We rambled up the long, winding slope of the aristocratic stairs, every step of which covered with Turkey rugs, looked gorgeous as the hammer-cloth of the Lord Mayor's coach; and Harry hied straight to a rosewood door, which, on magical hinges, sprang softly open to his touch. As we entered the room, methought I was slowly sinking into some reluctant, sedgy sea; so thick and elastic the Persian carpeting, mimicking parterres of tulips, and roses, and jonquils, like a bower in Babylon.

Long lounges lay carelessly disposed, whose fine damask was interwoven, like the Gobelin tapestry, with pictorial tales of tilt and tourney. And oriental ottomans, whose cunning warp and woof were brought into plaited serpents, undulating beneath beds of leaves, from which, here and there, they flashed out sudden splendours of green scales and gold.

In the broad bay windows, as the hollows of King Charles's oaks, were Laocoon-like chairs, in the antique taste, draped with heavy fringes of bullion and silk. The walls, covered with a sort of tartan-French paper, variegated with bars of velvet, were hung round with mythological oil-paintings, suspended by tasselated cords of twisted silver and blue. They were such pictures as the high-priests, for a bribe, showed to Alexander in the innermost shrine of the white temple in the Libyan oasis; such pictures as the pontiff of the sun strove to hide from Cortez, when, sword in hand, he burst open the sanctorum of the pyramid-fane at Cholula; such pictures as you may still see, perhaps, in the central alcove of the excavated mansion of Pansa, in Pompeii, . . . such pictures as you might have beheld in an arched recess, leading from the left hand of the secret side gallery of the temple of Aphrodite in Corinth.

In the principal pier was a marble bracket, sculptured in the semblance of a dragon's crest, and supporting a bust, most wonderful to behold. It was that of a bald-headed old man, with a mysteriously wicked expression, and imposing silence by one thin finger over his lips. His marble mouth seemed tremulous with secrets.

"Sit down, Wellingborough," said Harry. . . .

HERMAN MELVILLE
(*Redburn: his first voyage*, 1849)



Bombed Buildings

The small engravings that decorate this and the following page are taken from *The Bombed Buildings of Britain*,* published this month. This collects in book form the systematic record of bomb-damage to buildings of architectural note, which has been appearing in monthly instalments in THE ARCHITECTURAL REVIEW.

The book covers the years 1940-41—that is, the now historic "blitz period." Photographs of the buildings in their damaged state are accompanied by notes about their history and architectural attributes, and by small engravings showing their original state, after the fashion of those reproduced here. The largest part of the book is given to London; this section is followed by separate ones dealing with Bristol, Coventry, Portsmouth, Plymouth, Manchester and Liverpool; by another section dealing with several other big cities, including Birmingham, Southampton and Hull; and finally by a section dealing with damage in smaller towns and in the country. The illustrations are chosen to serve the dual purpose of an obituary record of architectural "casualties" and a pictorial record of air-raid ruins.



C. R. Ashbee

C. R. Ashbee, who died at the age of seventy-nine on May 23, was one of the foremost exponents of the domestic revival of the nineties. Six years younger than Voysey and five years older than Mackintosh he held, indeed, a middle position between theirs. The metal work for which he was especially famous, and which was regularly illustrated in the early volumes of *The Studio*, had a flow of line pointing forward to Art Nouveau, but the houses which he designed, especially the Magpie and Stump, or the Chelsea Embankment illustrated in volume 51 of THE ARCHITECTURAL REVIEW, and a villa at Taormina (see THE ARCHITECTURAL REVIEW, Vol. 29), are of a sobriety and sharpness quite alien to Mackintosh.

* *The Bombed Buildings of Britain*. Edited by J. M. Richards, with notes by John Summerson. The Architectural Press. Price 15s.



but distinctly akin to the early Voysey of the Hans Road houses.

Besides being a sensitive designer, Ashbee was a courageous thinker ready to carry out at his own risk Morris's aesthetico-social teachings. The idea of the artist-craftsman as a willing and welcome servant of the community had guided Lethaby in the organisation of the new London Central School of Arts and Crafts. Walter Crane for a short time tried to introduce it into the Royal College. Ashbee, fresh from King's College, Cambridge, and some lecturing at Toynbee Hall, made up his mind to found a school and community of his own. He started it in the east end, and called it the Guild and School of Handicraft. This was in 1888. A printing press, the Essex House Press, was soon added, printing Ashbee's own books—books which deserve to be more widely read

than they are: brilliantly written, and constructive in their contents. After some years in the east end, Ashbee realised—and in this he went beyond Morris—that for a regeneration of healthy craft another atmosphere was needed than what London could afford. So he moved his guild and School to Campden in the Cotswolds. There each member was to have a small holding besides his workshop. The scheme was consistently worked out and would, as a pertinent social experiment, have been worth governmental support in its early stages. As conditions were thirty-five years ago, Ashbee could not make his community pay. The last war all but ended it. Present-day agricultural tendencies might have saved it, but they had no power then. For the last forty years Ashbee's name was before the public as that of an author on matters of wider cultural import. He had a reputation abroad as well as in England. When the Grand Duke of Hessen (half English and a believer in the ideals of the arts and crafts) resolved to redecorate part of his palace at Darmstadt, Ashbee and Baillie Scott designed most of the rooms. They started that renaissance at Darmstadt which a few years later led to the architectural innovations of Olbrich and young Peter Behrens.

Four Exhibitions

The fact that four exhibitions have been held in the last two months on

matters connected with architecture and design proves a very encouraging determination on the part of those responsible for their organisation to keep public opinion focused on the problems of post-war planning. Two of the exhibitions, moreover, are being toured by the C.E.M.A. which means that they will be seen in provincial towns not usually reached by such propaganda. One of these, called *Living in Houses*, was opened in London by Sir Stafford Cripps. The material had been chosen and arranged by Miss Denby and Noel Carrington. It consists of a number of panels with photographs and drawings, dealing chiefly with interior planning. The display might have been on a bolder scale, and clearer in stating which of the products recommended will be only accessible to the wealthy.

In the other C.E.M.A. exhibition, the one called *Design*, which was shown in London at the Geffreye Museum, a similar deficiency was noticeable. The products chosen were chiefly pottery, glass, household utensils and textiles. In pottery a fair balance had been reached between hand-made and machine-made things. But in textiles hardly any machine-weave or machine-print was on show. It would altogether probably have been better at a time when so little can be bought to make the exhibition frankly educational and tell visitors more about materials and processes, as was indeed done in the

excellent large photographs of glass-making and pottery-making.

At the R.I.B.A. could be seen a Women's Exhibition of Housing organised by the Housing Centre. It was much frequented by school children and elementary enough to appeal to them. Only the illustrations of recent developments in allied countries and Dominions were deplorably scrappy.

The London Museum summer exhibition is historical rather than topical, as its title *London Heritage* indicates. It is devoted to London's streets and buildings, chiefly with a view to damage by bombing. Photographs of bombed buildings are shown side by side with old prints and contemporary drawings of the Hanslip Fletcher-Dennis Flanders kind, and with pre-war photographs.

Local Authorities and Municipalization of Land

An article by Sir Charles Bressey, published in a recent number of the *Observer*, and entitled "Control of Rebuilding," ended with the following words :

"To bring about this transformation in crowded centres of population no mere modification of town-planning powers will avail, nor is it likely that proposals which have been broached for the pooling of ownerships over a large area would serve

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[continued from page xxxiv]

the purpose, seeing how much time would inevitably be consumed in setting up so novel and complicated a piece of financial machinery. Time is not at our command, and simplicity is the only key to success. In our present plight, planning powers must be exercised by an authority wielding full rights of ownership. There was never so favourable an occasion as the present for the compulsory acquisition of these rights by the municipalities, and with the nation in its present mind there is no reason to suppose that Parliament would impose terms of purchase likely to jeopardise civic prosperity."

The following week the *Observer* printed a number of statements by Lord Mayors of blitzed cities commenting on Sir Charles Bressey's views. They show a large measure of agreement, and as they can be said to represent the opinions of the very authorities in whose hands it is suggested control of land should be vested, they are of considerable interest. The following are extracts from some of these statements:

The Lord Mayor of Birmingham (Councillor Norman Tiptaft):

"I agree with Sir Charles Bressey. If cities are to be in keeping with the needs of the twentieth century rather than the nineteenth—or in some cases the eighteenth or seventeenth—there will have to be drastic replanning on totalitarian lines, irrespective either of vested interests or fossilised traditions.

"Generally the procedure should be for the local authority to prepare the scheme—not as it would to-day, based on values of leases or the state of the local rates—but on what the City needs. That should then be submitted to the Ministry. If the

Ministry approved—and if the local authority were any good and the Ministry competent—agreement should be quickly reached. Given such agreement then the local authority should be granted complete powers over all sites—indeed over all land in, its area, and also the requisite financial credit to purchase and develop it as required."

The Lord Mayor of Bristol (Mr. E. T. Cozens):

"Ownership by the municipality will enable the best schemes to be evolved, as indeed they can be, provided the National Exchequer will bear a proper part of the cost of acquiring areas suitable for planning to meet the needs of the future. Such an approach will cut out the almost insoluble task of trying to reconcile diverse and competing interests and, what is of great importance, it will make for speed.

"The precedent contained in the Housing Acts ought to be followed; immediate entry on the land can be made and compensation and price-fixing follow possession by the Authority."

The Lord Provost of Glasgow (Mr. John M. Biggar):

"I am in general agreement with Sir Charles's point of view, but I would add that the facilities for replanning would be furthered and the local authority helped in its decision to replan areas in rebuilding if the whole cost of the buildings and sites required for clearance were met from national funds without charge to the local ratepayers. It is probably too much to expect nationalisation of the land, but areas approved of for replanning should be treated in this way."

The Lord Mayor of Plymouth (Viscount Astor):

"Public ownership of land in a city is vital to its replanning. Hitler has given blitzed towns an unexpected chance which the Government must not spoil by lack of vision and courage.

"Parliament should demand immediate legislation, otherwise vested interests will soon diminish our prospects for the best results."

The Lord Mayor of Portsmouth (Councillor Sir Denis L. Daley):

"Sir Charles has put in a few words the difficulties under which local authorities are now labouring.

"There is one point, however, that he has not mentioned, and I think it ought to be raised—that is, the problem of re-planning an unidentified area. For instance, in my own city, if we are to replan upon ideal lines, it means that although approximately 60,000 of our former inhabitants will not be rehoused within the city's confines, it will still be necessary for us to obtain from them the revenue which enables the city to exist.

"It, therefore, consequently follows that if we are to replan for the whole of the former inhabitants of Portsmouth, one of the first things the Ministry must do is to tell cities and towns the added areas they are to be given so that they may be able to lay out this in conjunction with the replanning going on within the city itself."

The Mayor of Coventry (Councillor A. Robert Grindlay, J.P.):

"A promise that there will be proper zoning and that a permanent social and communal life will be developed around them acts as a tonic to the people here and to all progressive thought in the country.

"There are already plans for a new and more beautiful Coventry to rise again. . . . The achievement of the plans remains a difficult problem. We are faced with the multiplicity of small ownerships in the city areas, the lack of enabling powers, and a central Government lead in the form of a national plan."

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MARGINALIA

CORRESPONDENCE

The Editor
THE ARCHITECTURAL REVIEW

Sir,
In the June issue, I read my name as one of the architect members of the M.A.R.S. Group who served actively on the Town Planning Committee.

Although I am in general agreement with the aims of the Group, I have disagreed from the start with this scheme for re-planning London, and don't want to claim any credit for a plan to which my only contribution has been ineffective protest.

WILLIAM TATTON BROWN,
Cheam, Surrey.

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